What Macroeconomic Variables Should We Be Watching in These Uncertain Times?

Emerging Issues for Financial Planners Workshop
November 22, 2013

John B. Penson, Jr.

Regents and Stiles Professor

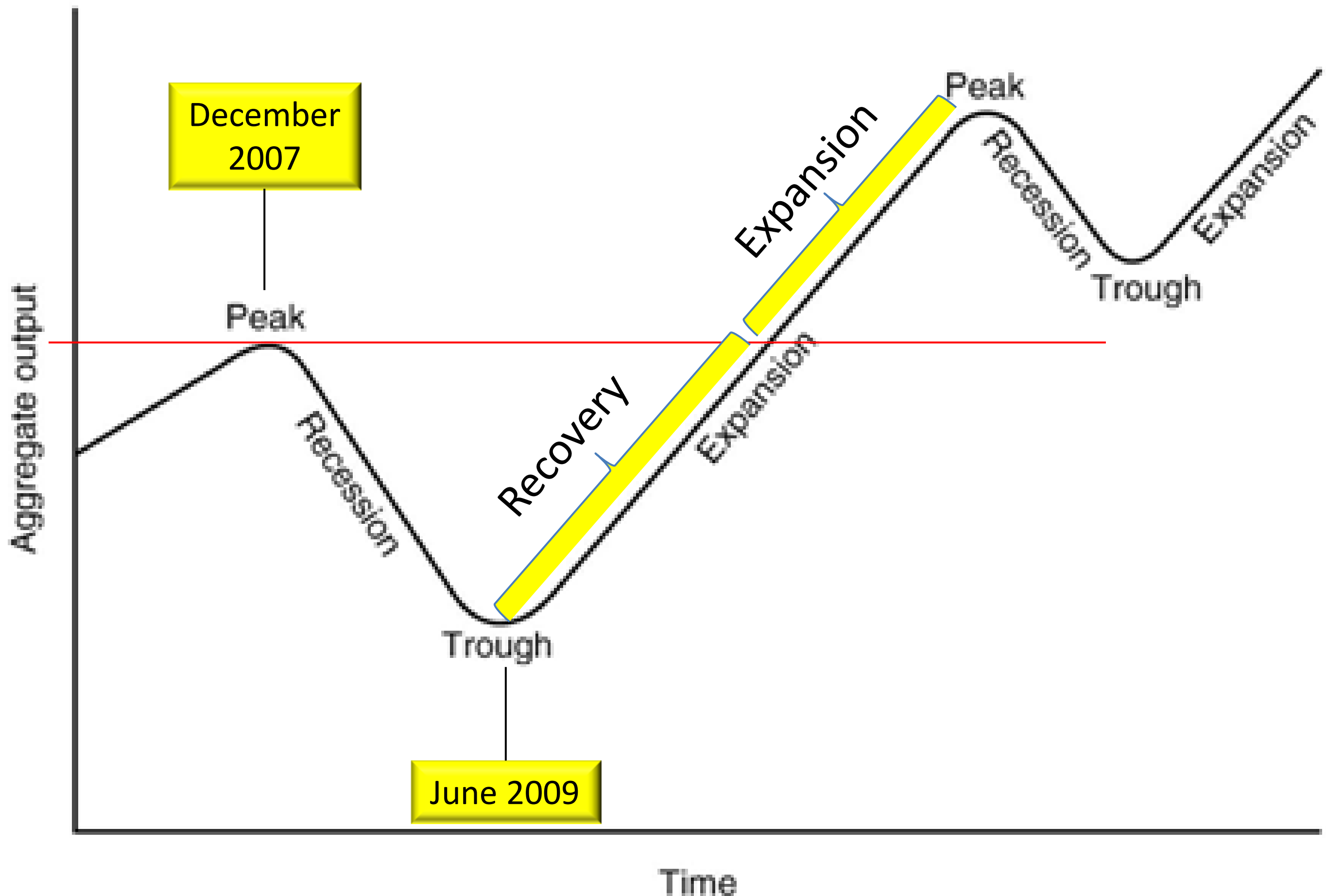
Texas A&M University

The Big 5 Macro Variables

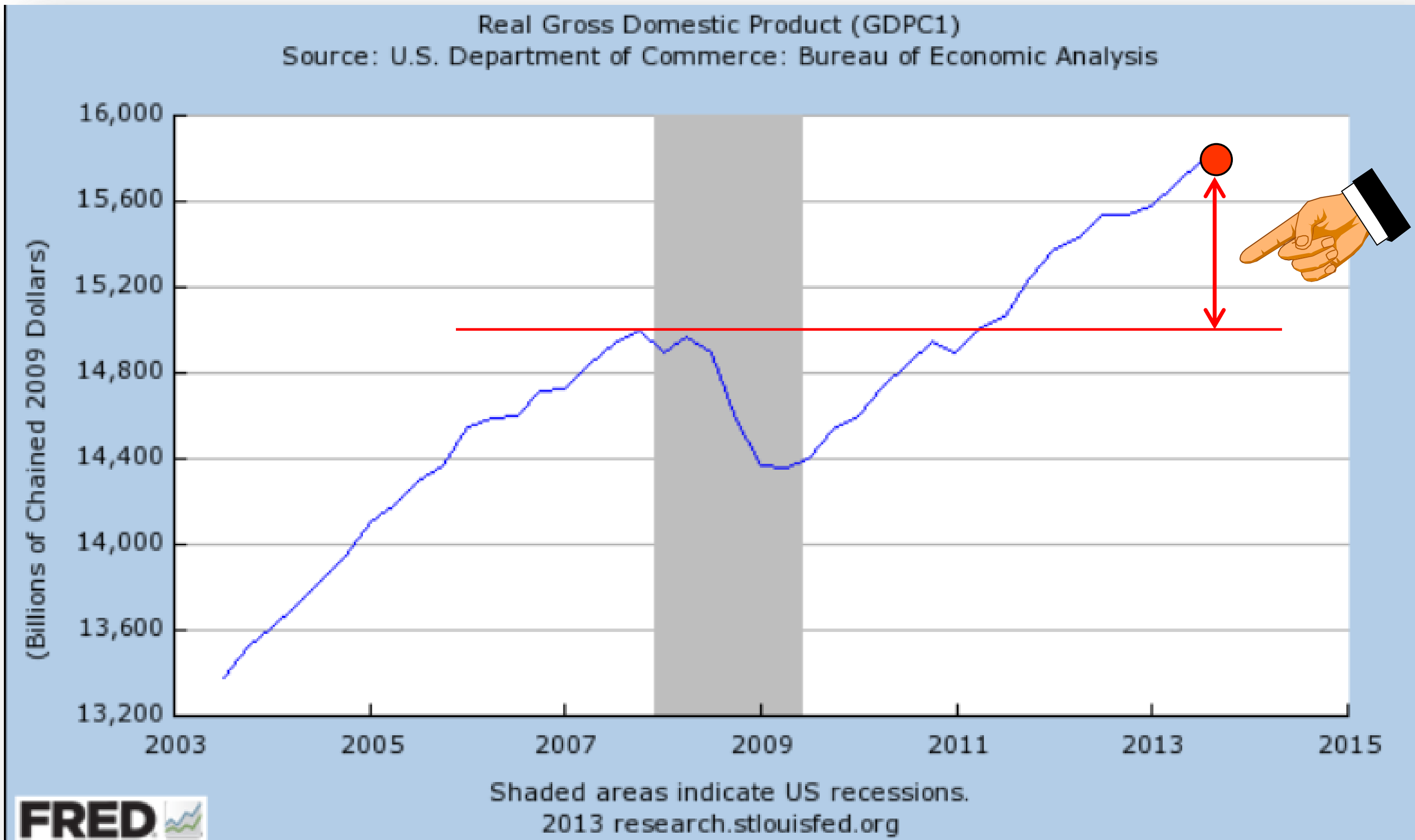
- ✓ You no doubt have specific macroeconomic indicators that you follow in monitoring the health of the general economy.
- ✓ Here are my top five:
  1. Rate of growth in GDP
  2. Rate of unemployment
  3. Rate of interest
  4. Rate of foreign exchange
  5. Rate of inflation

#1:Growth in GDP

Four Phases of a Business Cycle

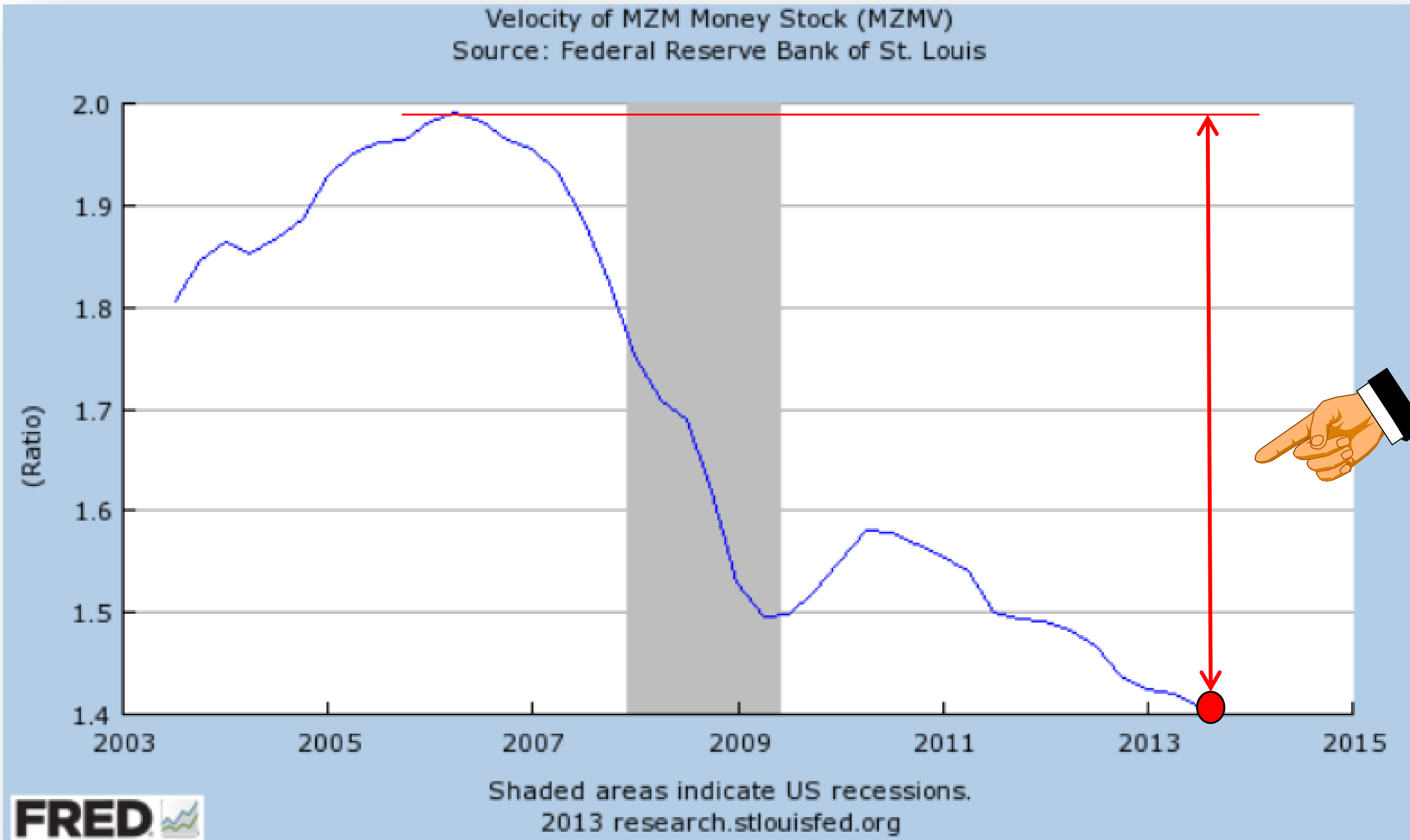


Economy Expanding…



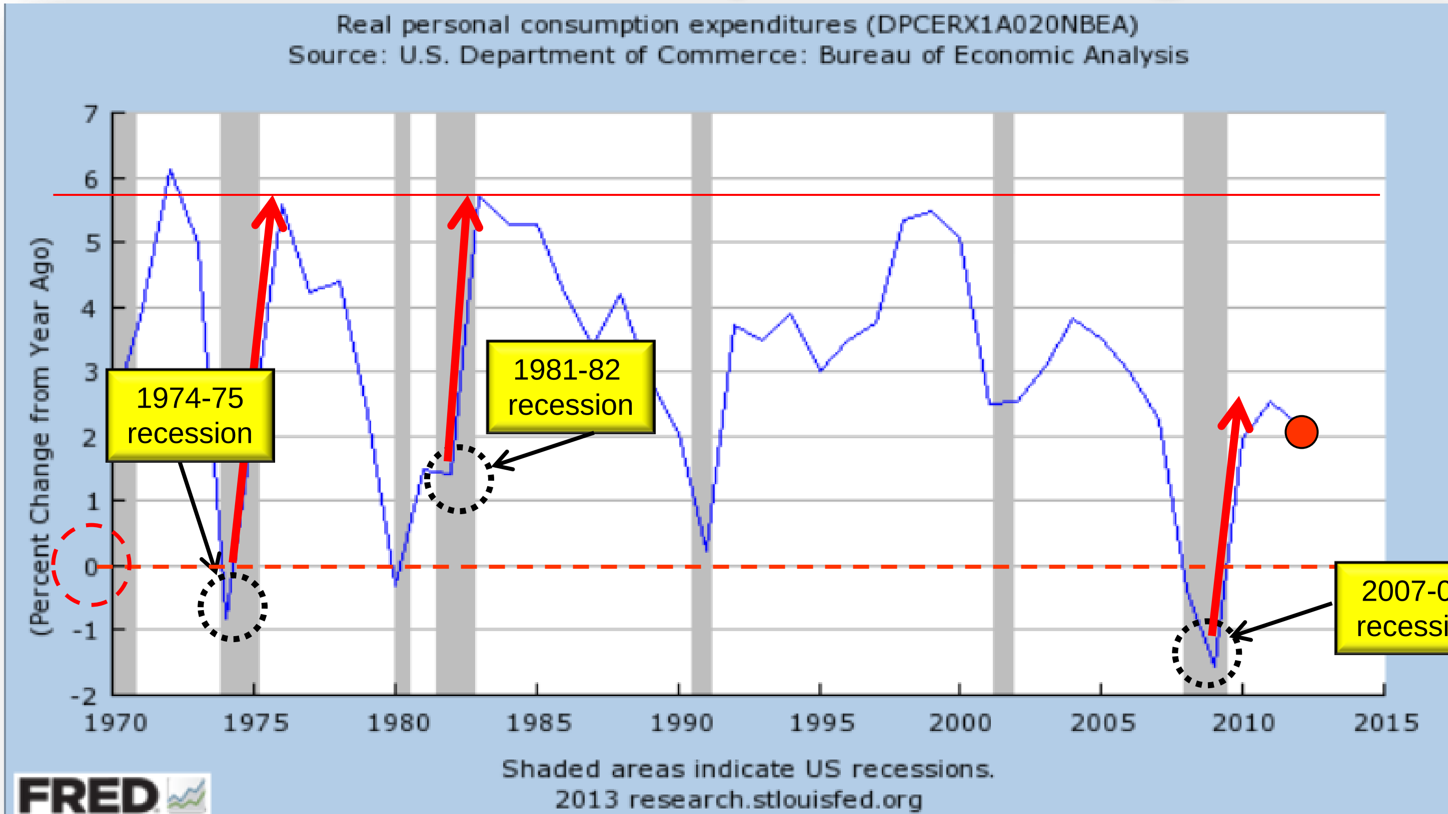
The economy is expanding at this point, albeit at a sluggish rate. Real GDP is growing about 2-2.5%, but is below potential GDP.

Velocity of Money



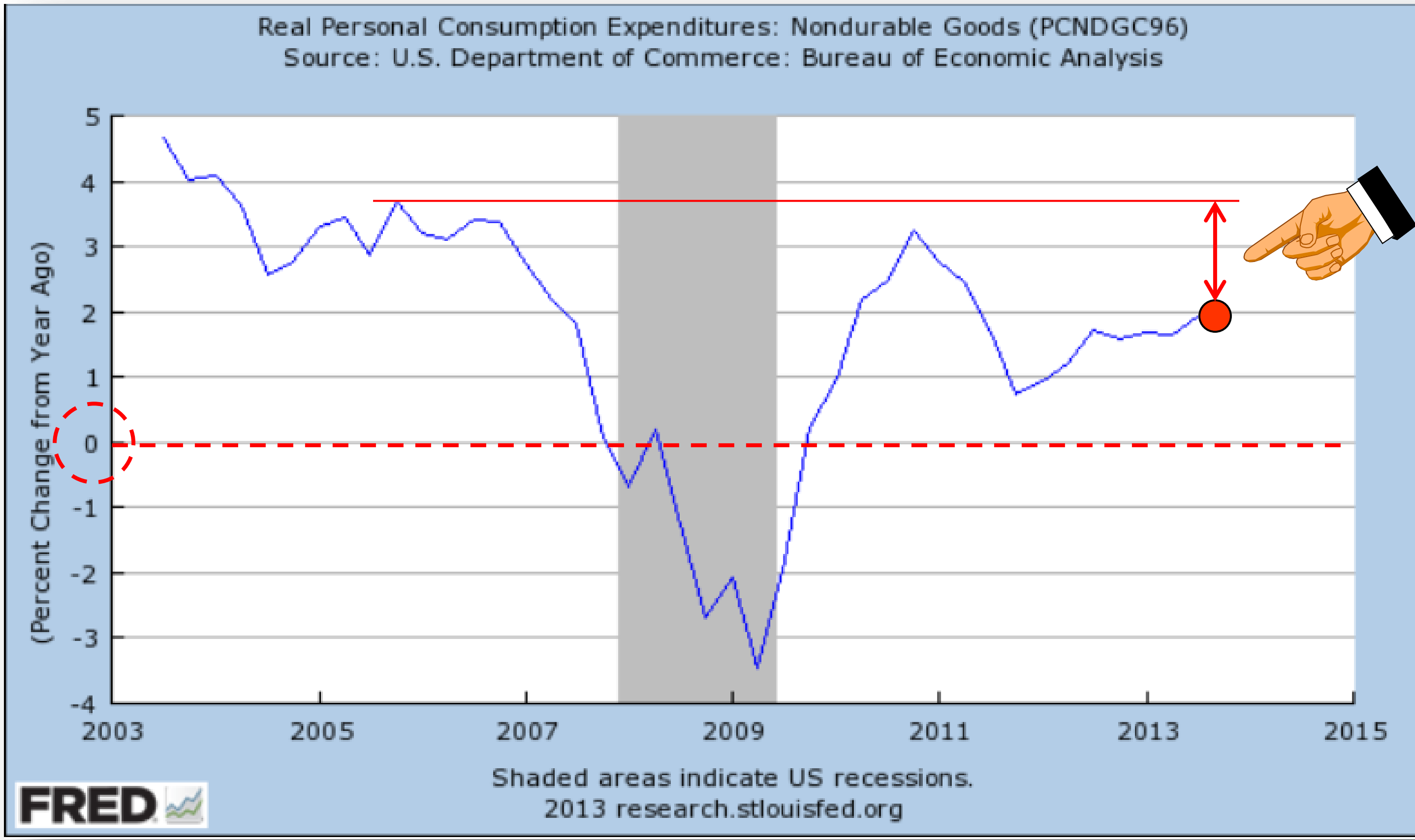
The velocity of money reflects economic activity relative to the money supply. This demonstrates lack of stimulus from expansionary monetary policy to date.

Annual Growth in Consumer Spending



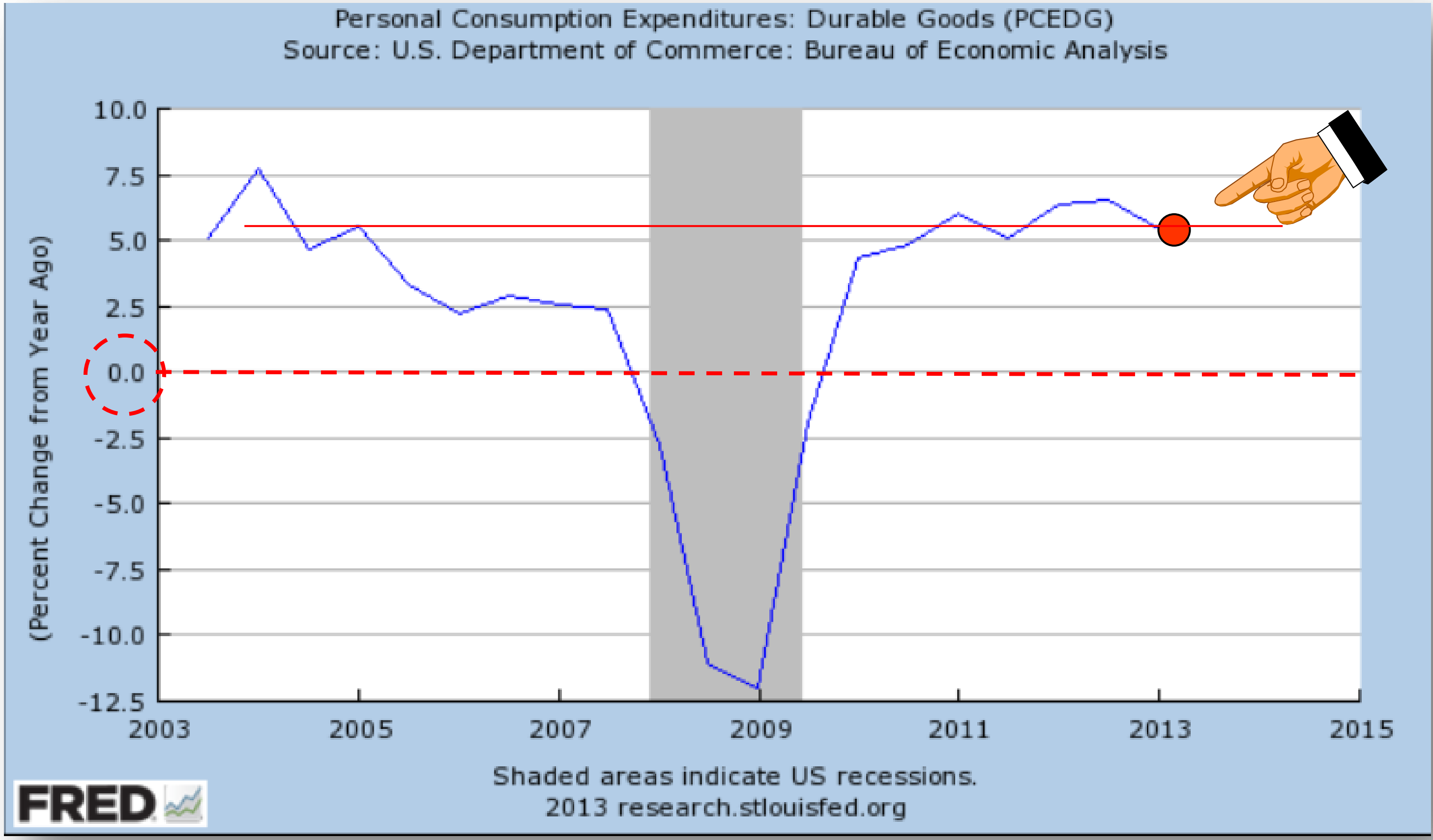
Roughly 70 percent of what the U.S. economy produces is for personal consumption. This is divided into durable and non-durable goods and services.

Annual Growth in Nondurable Goods



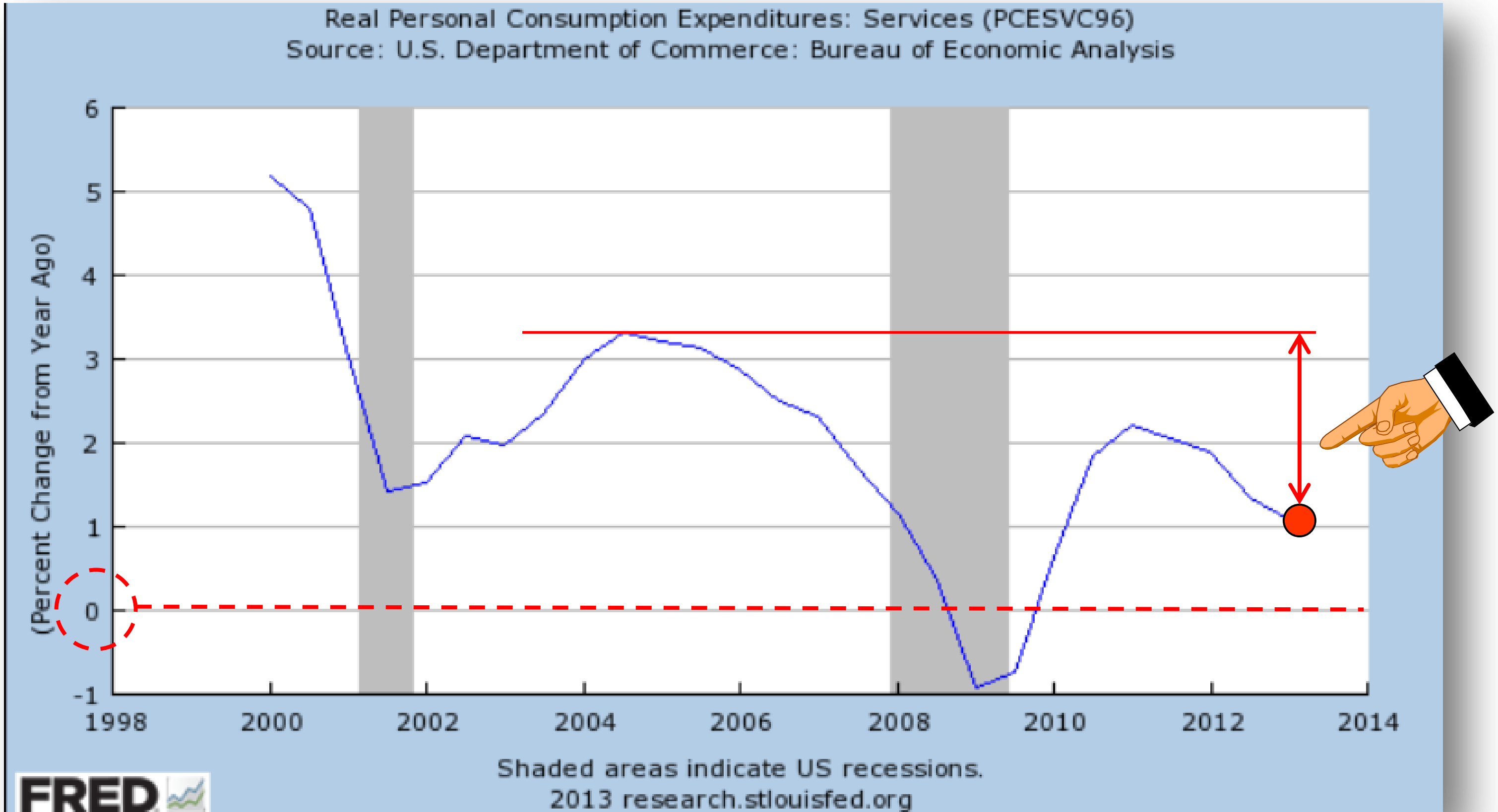
A good with an expected lifespan of three years or less. Examples of non-durable goods include food, clothing and fuel.

Annual Growth in Durable Goods



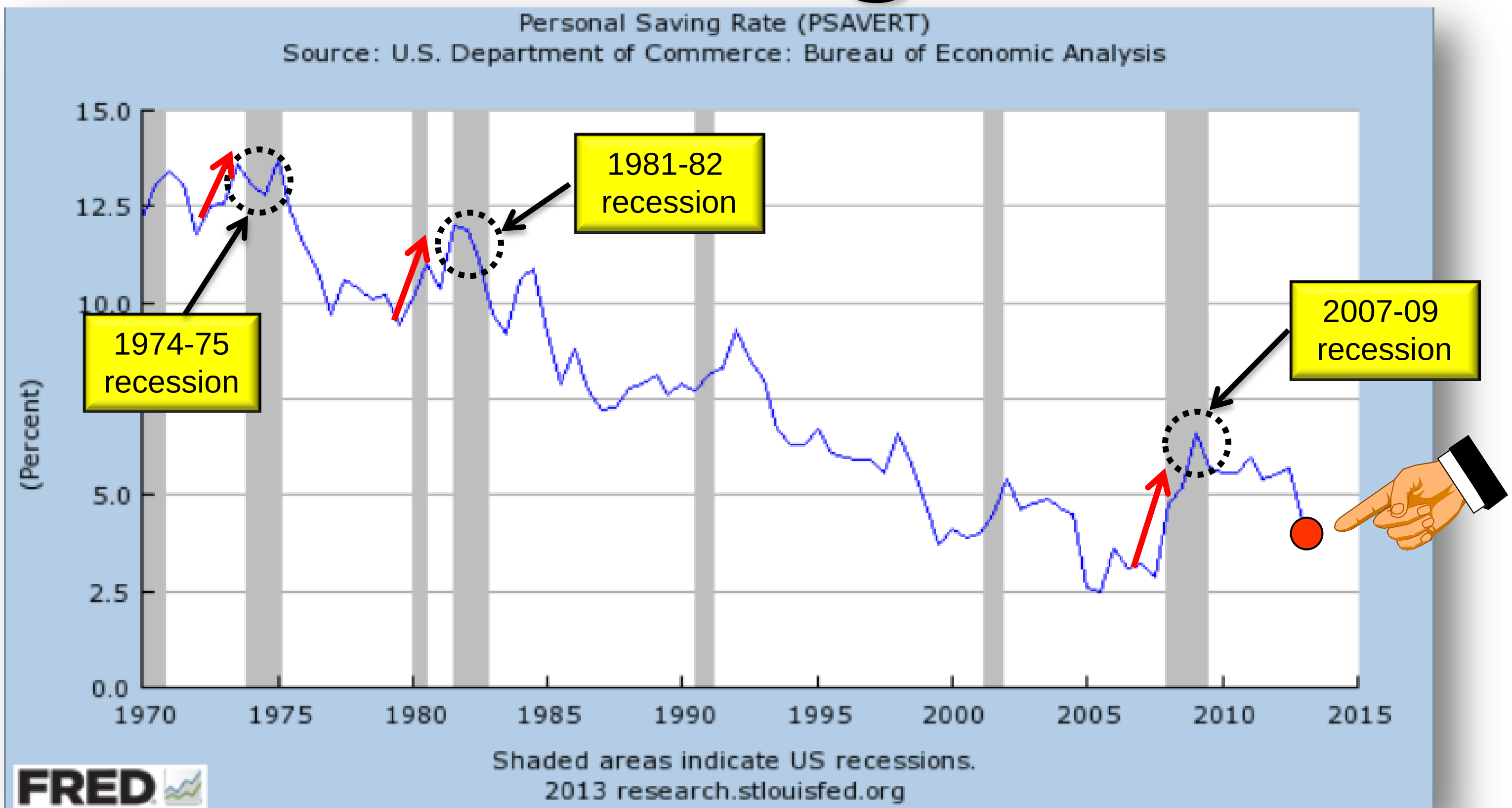
Durables goods are goods with a longer lifespan. Some examples of durables are automobiles, appliances, home furnishings, lawn and garden equipment and consumer electronics.

Annual Growth in Spending on Services



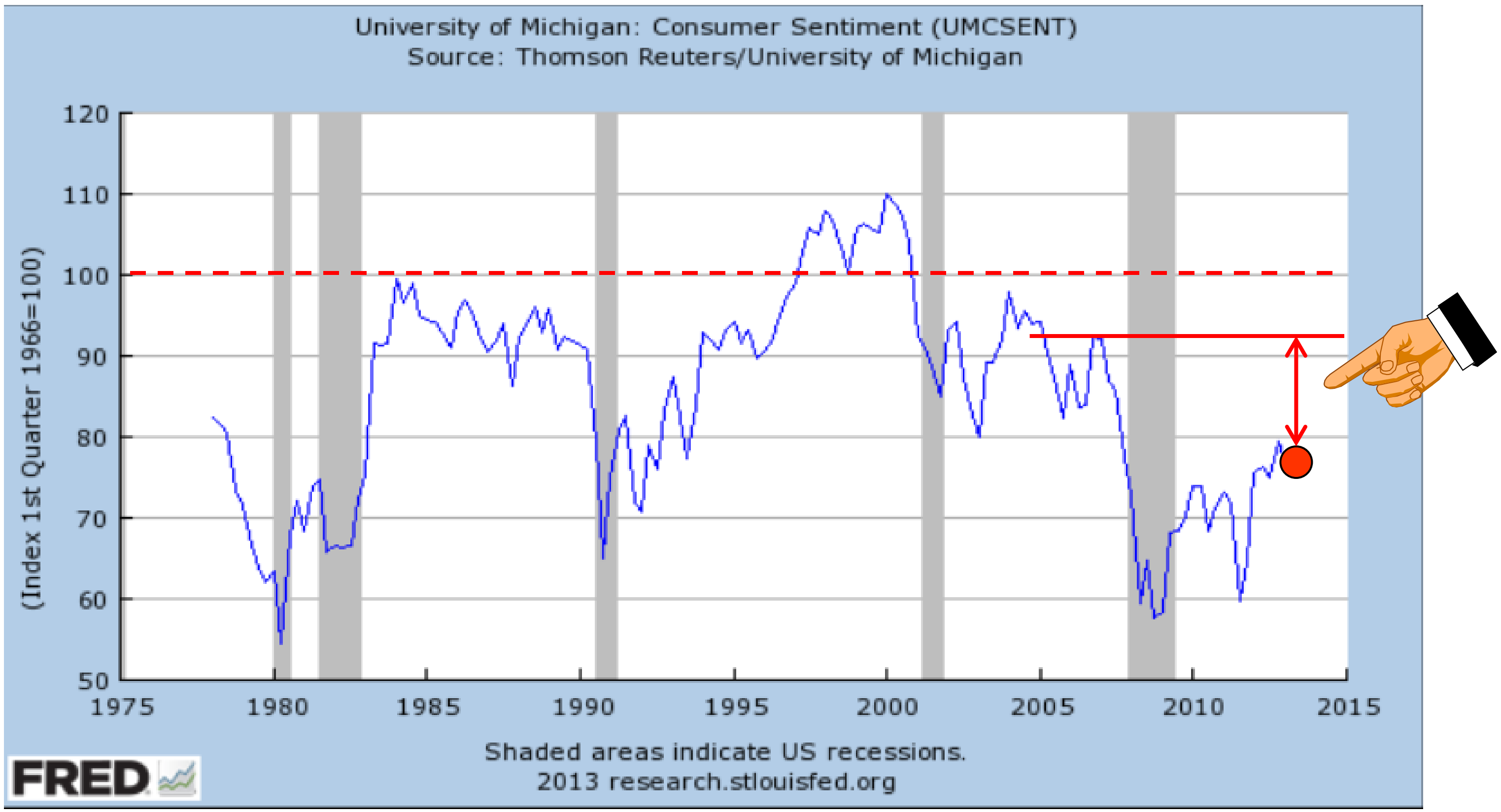
Consumer services refers to expenditures by consumers for services rendered by others. This represents over **45 percent of GDP**. Two major subcategories of services are financial services and health care services.

Personal Saving Rate



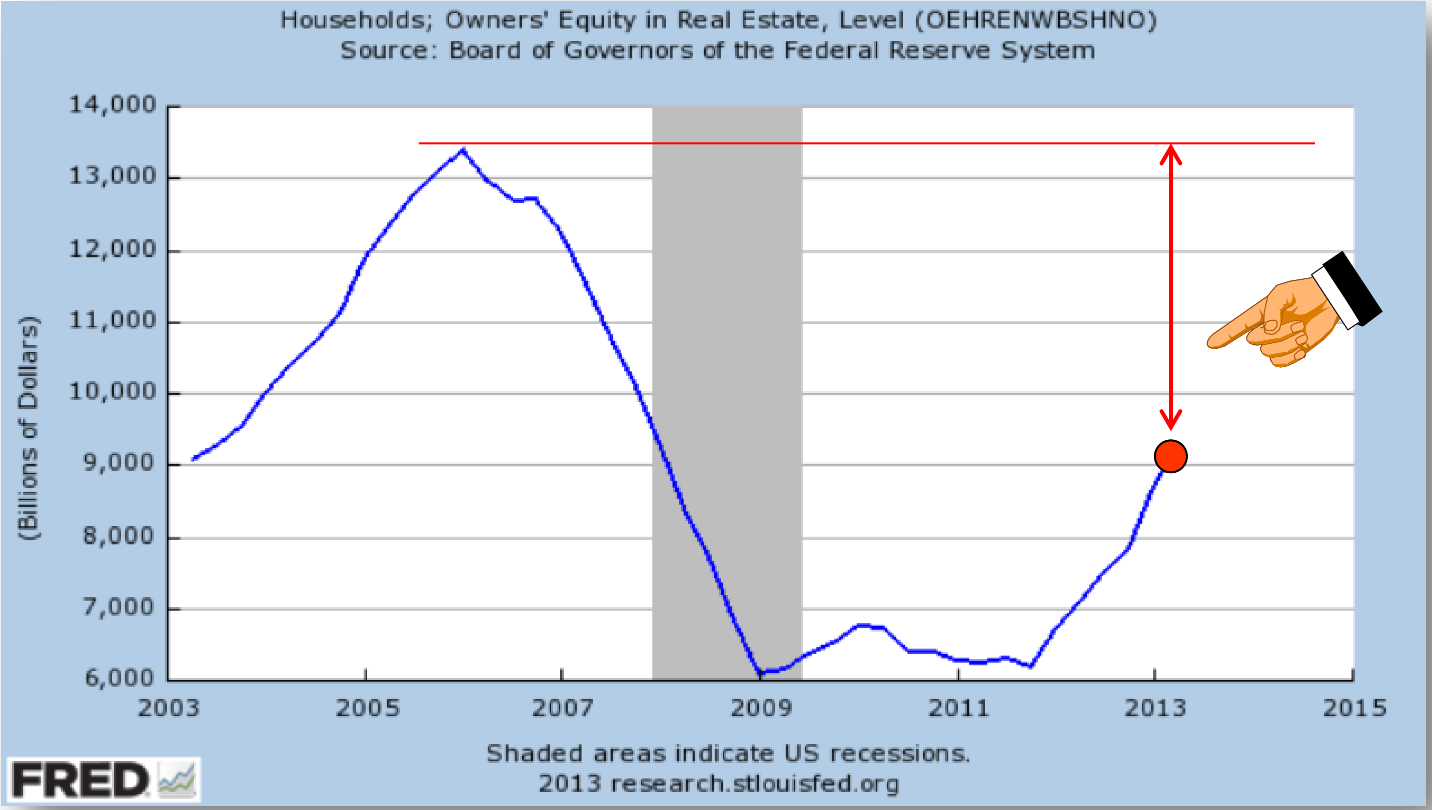
This rate refers to the percent of personal income allocated to savings broadly defined. Often seen as a leading indicator of future recessions. *The fact that the savings rate is declining suggests a recession is not expected by consumers*.

Consumer Sentiment



Consumer sentiment, while well below pre-great recession levels, is also trending upward.

Household Equity in Real Estate

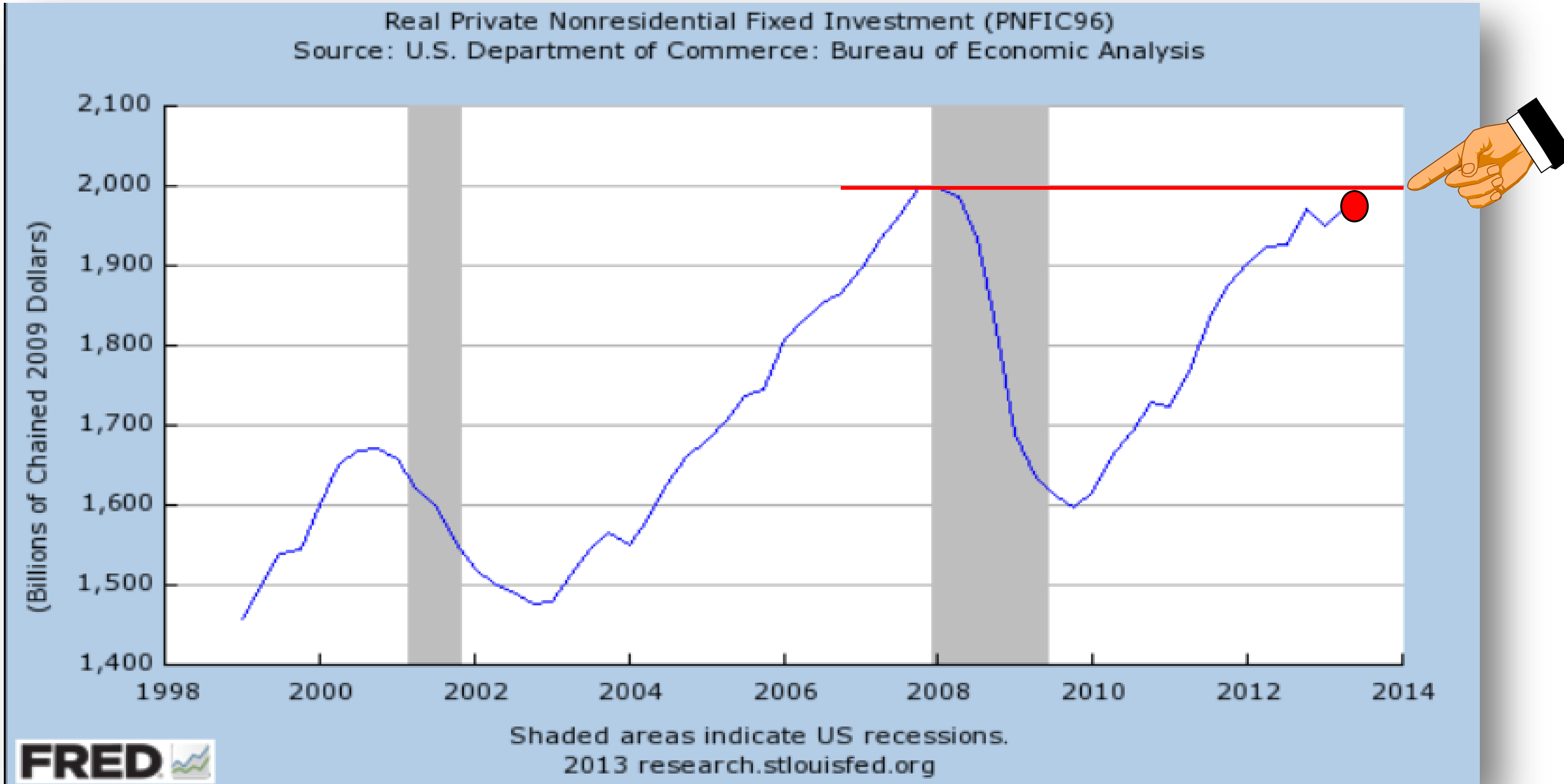


The fact that household equity in real estate assets is trending upward also helps consumer sentiment about the economy.

Consumer Spending

- ✓ Consumer spending has picked up since the recession but at a *slower pace* than seen in previous major recessions.
- ✓ Growth in spending on *non-durable goods* declined before the recession, reflecting increased savings, and *remains relatively weak*.
- ✓ Spending on *durable goods* is growing at pre-recession rates.
- ✓ Growth in spending on *services* remains *well below* the pre-recession levels.

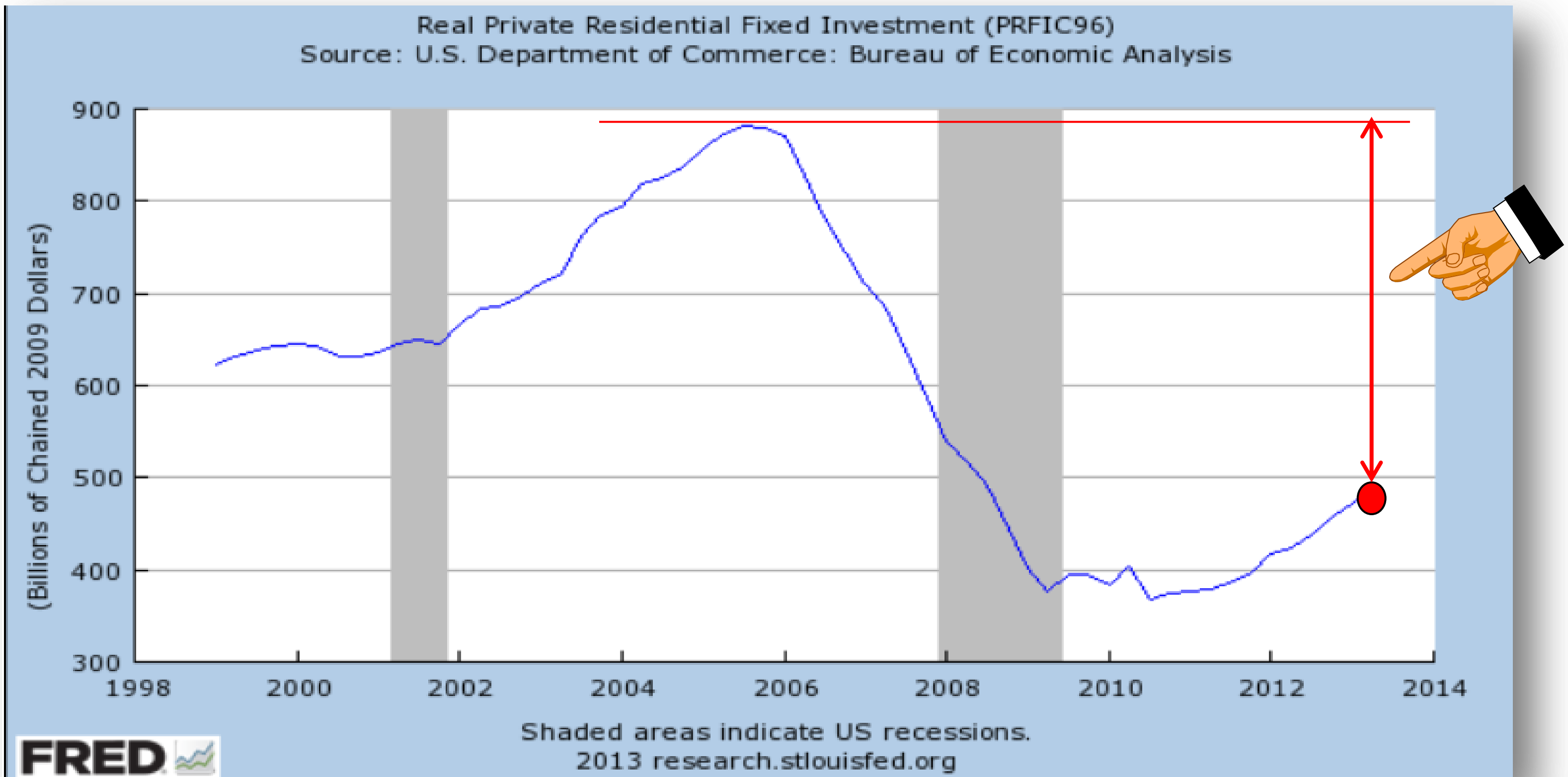
Annual Real Private Non-Residential Investment



Non-residential investment consists of business equipment and structures. It also includes commercial real estate such as shopping malls. Focus is placed on new capital formation, including new technology to further enhance productivity.

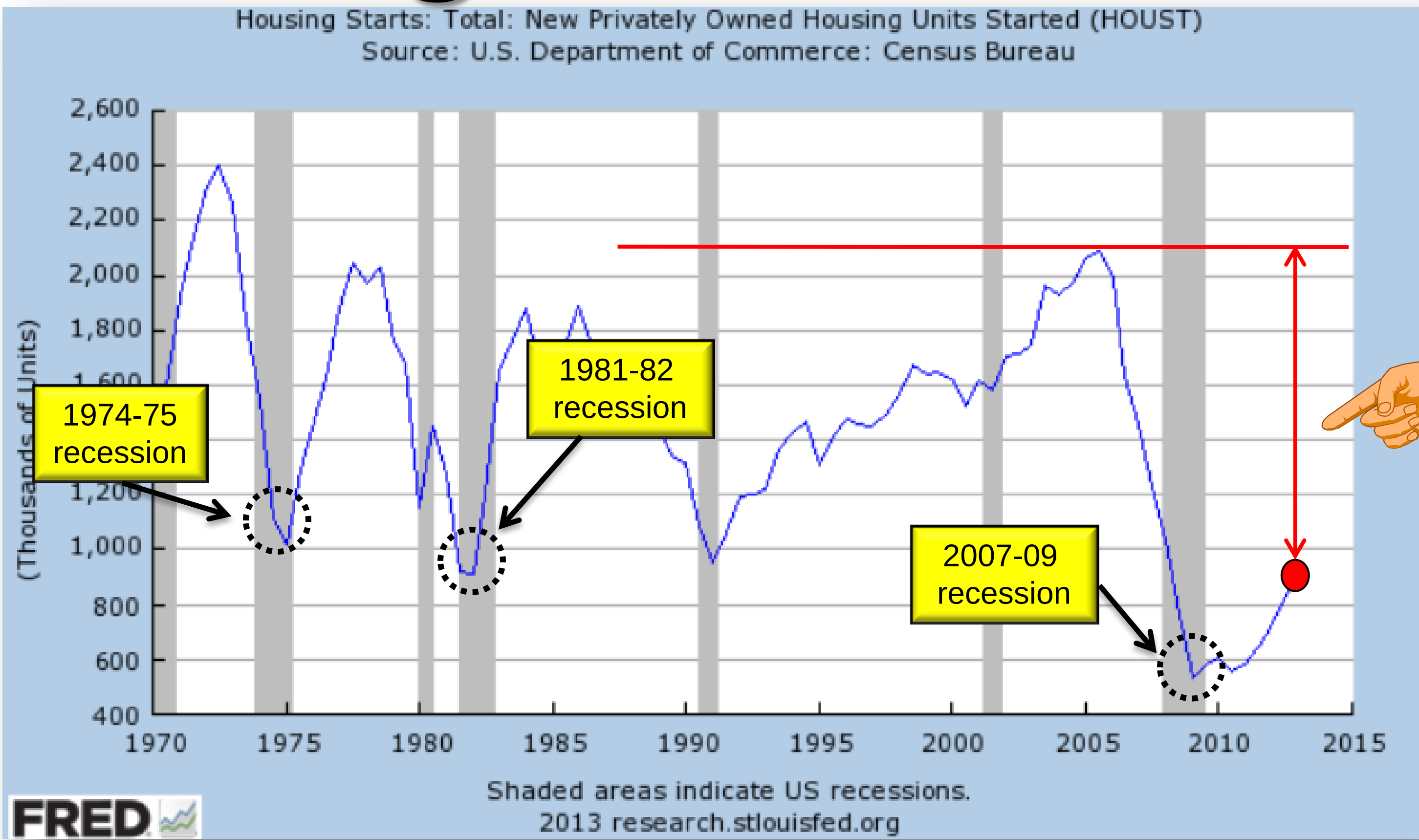


Annual Real Private Residential Investment



This includes residential construction of single-family homes and condos and townhouses. This <u>excludes</u> housing re-sales.

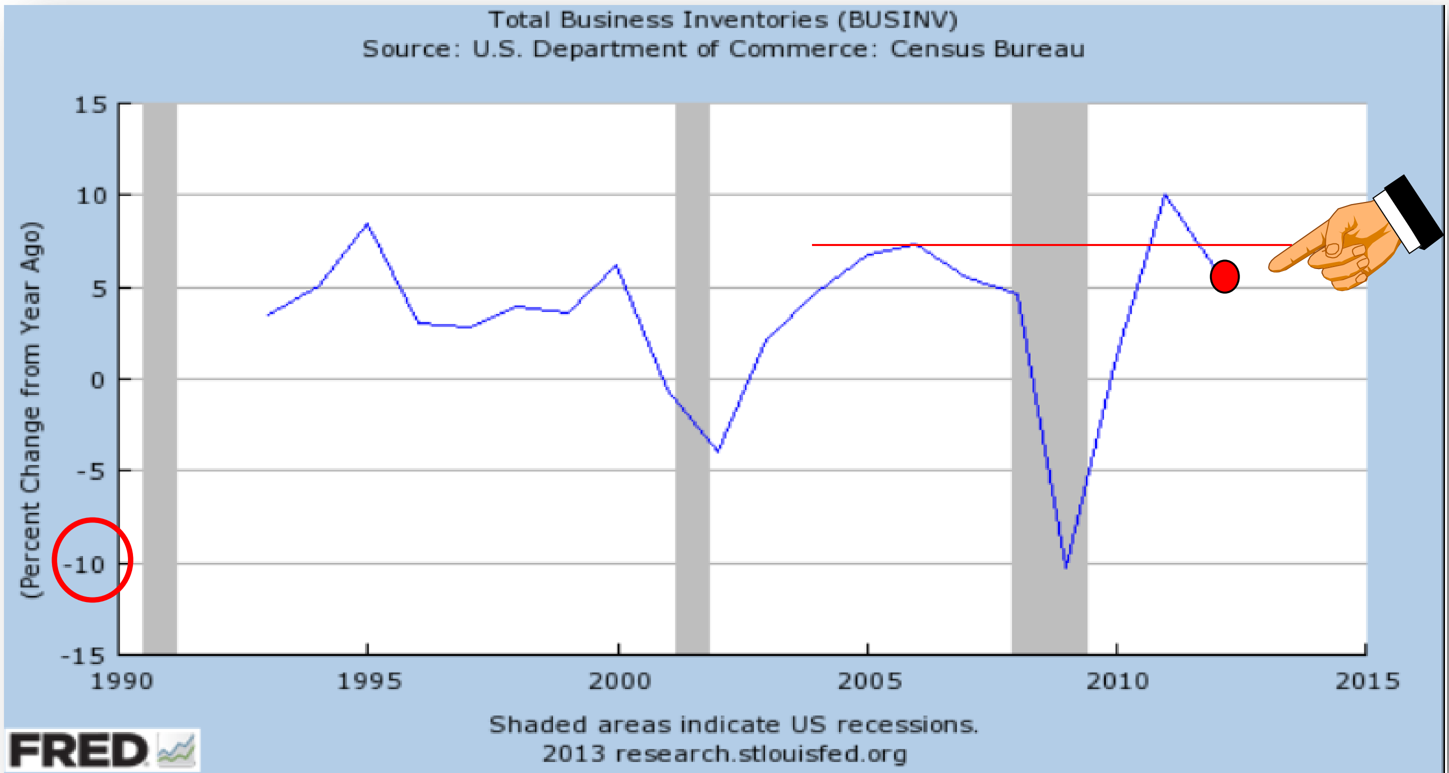
Housing Construction



We see this trend also reflected in the data on new housing starts.

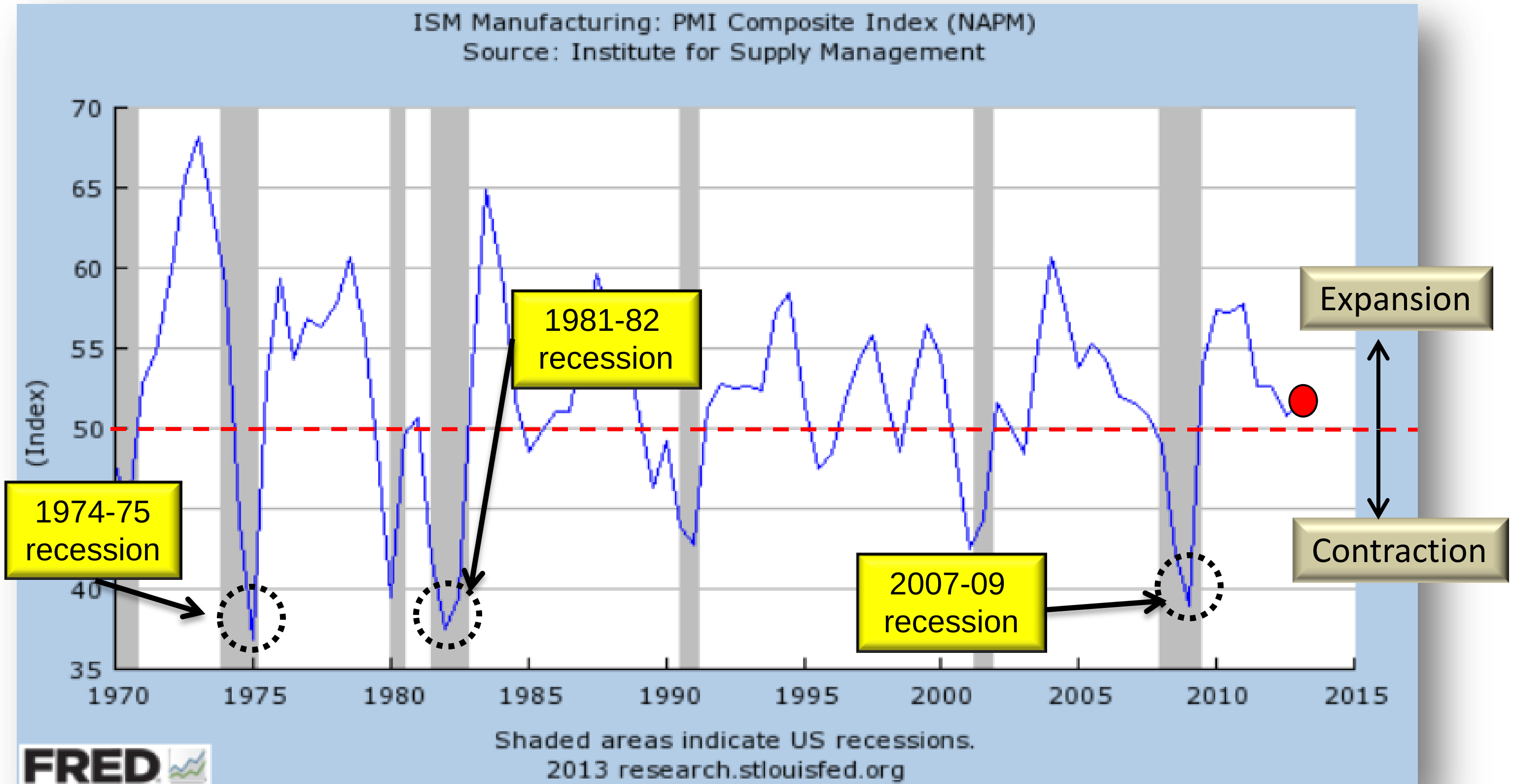


Annual Change in Business Inventories



Business inventories is often seen as a leading economic indicator. High inventories has implications for labor demand.

ISM Manufacturing Index



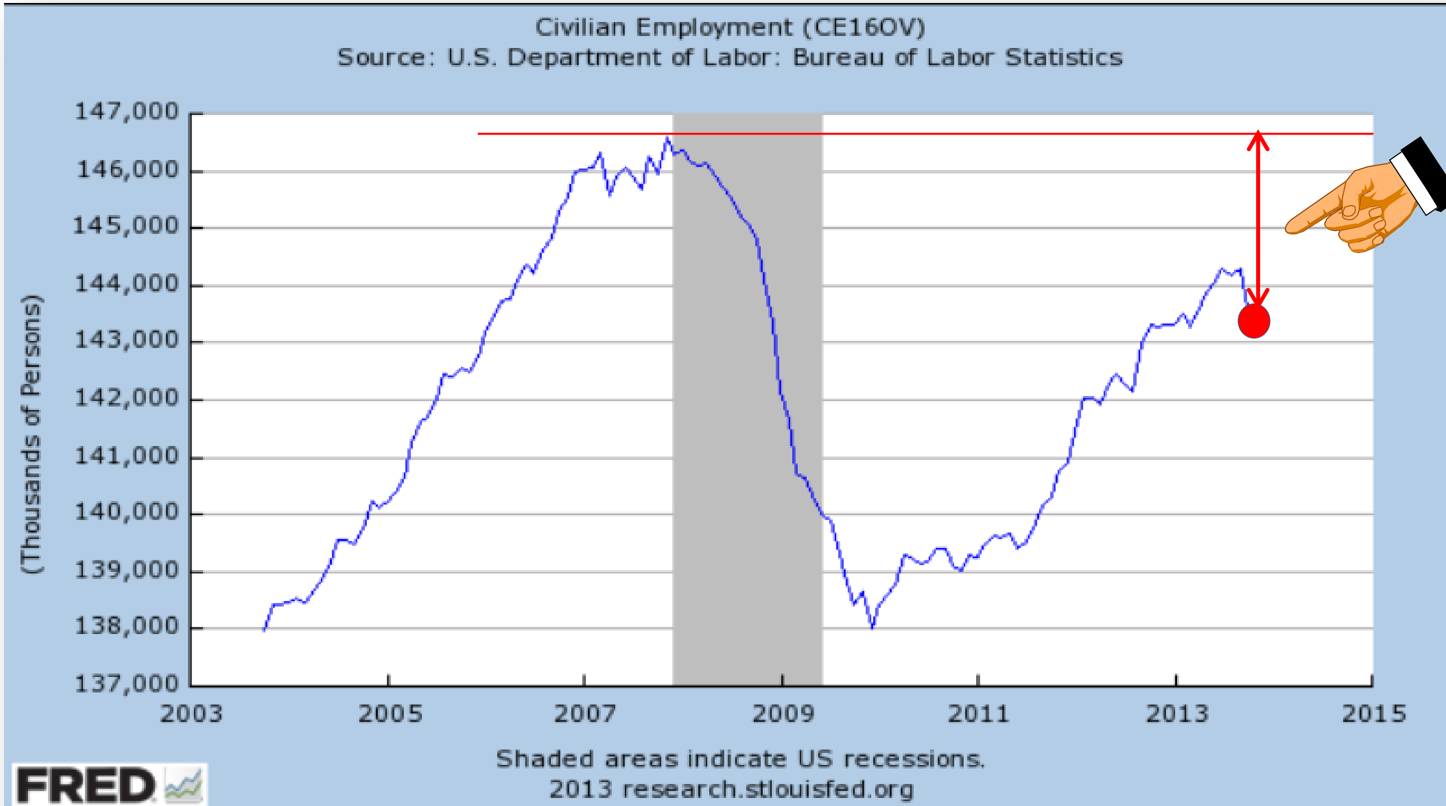
Institute for Supply Management manufacturing index is a closely watched indicator of expansion or contraction in the manufacturing sector.

Investment Expenditures

- Growth in gross private domestic investment has not bounced back at rates seen following recent major recessions.
- Growth in *Non-residential investment* has reached *pre-recession levels*.
- Growth in *residential investment*, however, has been *slow to recover*.
- *Business inventories* are at *pre-recession growth rates, although slowing in recent months*.

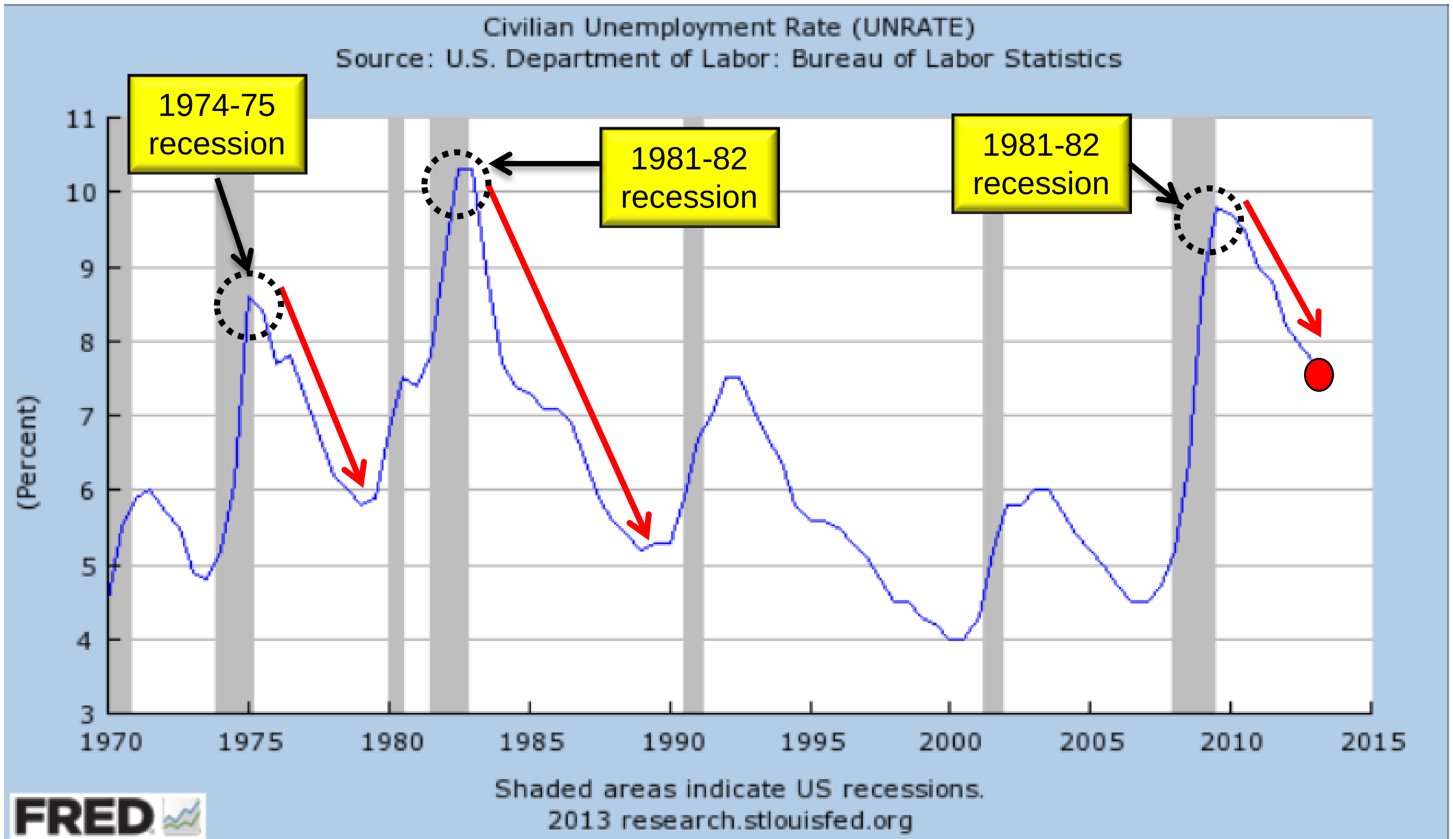
#2: Unemployment

Job Recovery



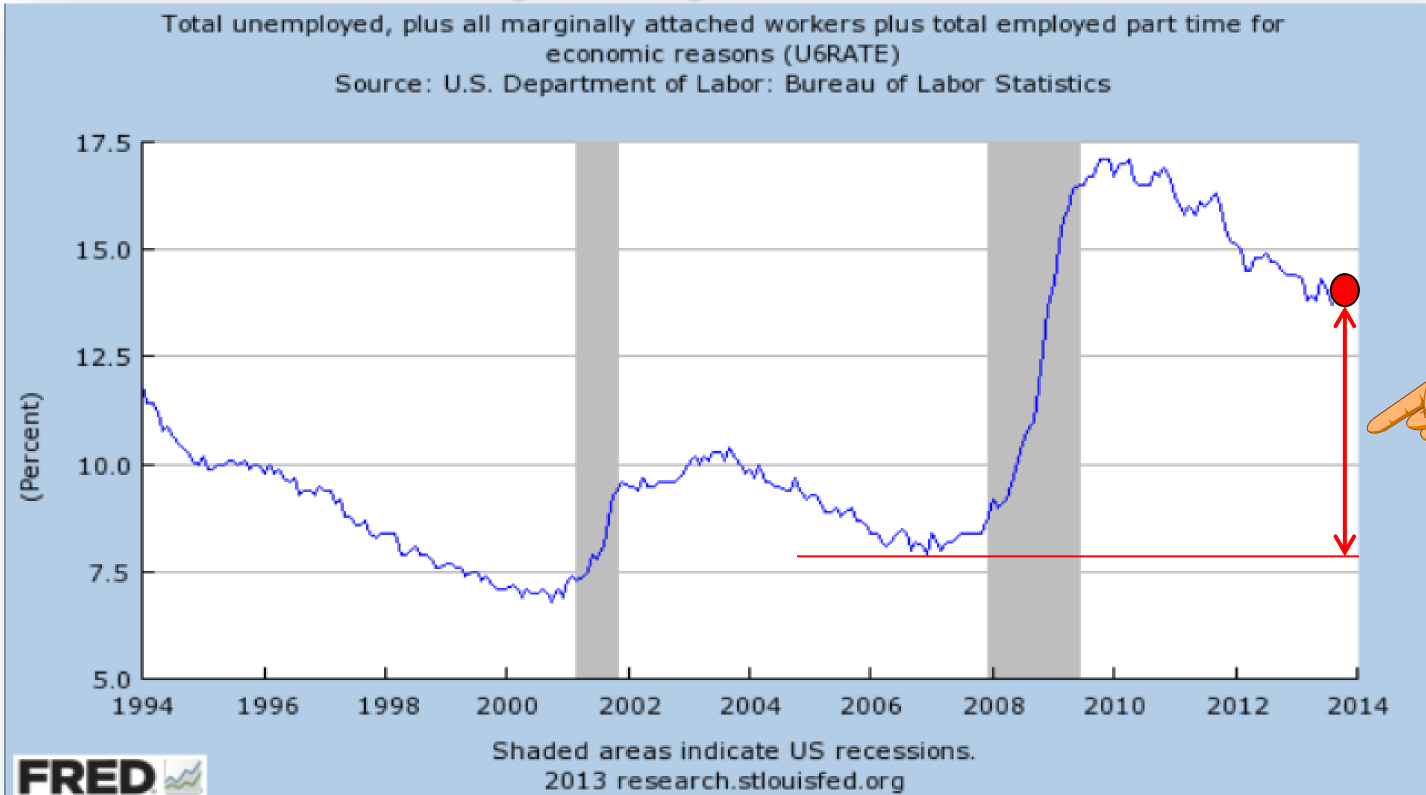
The economy shed 8.5 million jobs during the great recession. We are still some 4 million jobs in the hole from the peak just prior to the recession.

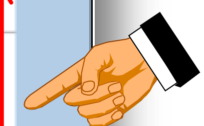
U3 Unemployment Rate



The **official rate** is equal to number of unemployed divided by the size of the civilian labor force. Unemployed includes those recently seeking employment or laid off and waiting to be recalled.

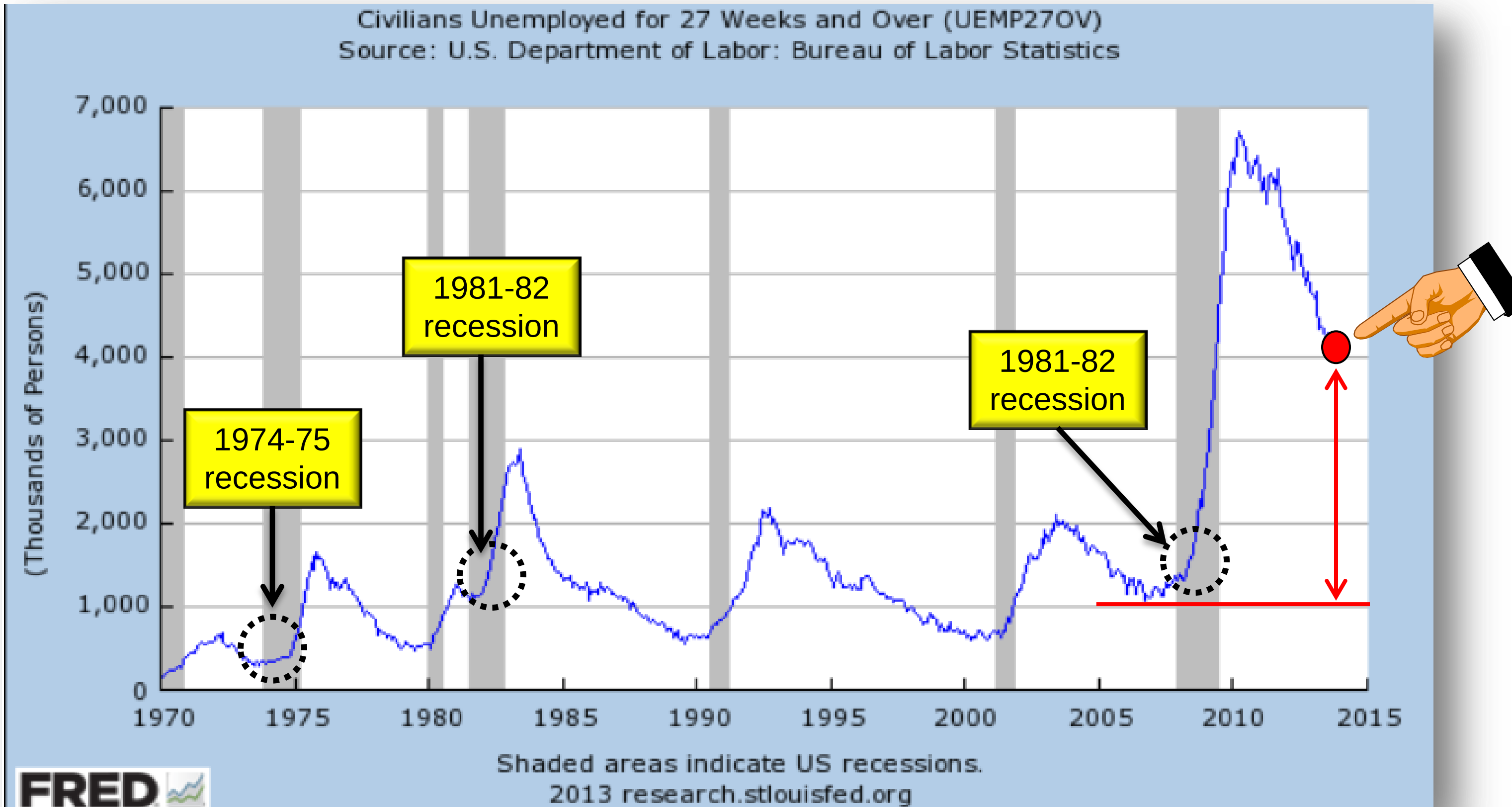
U6 Unemployment Rate





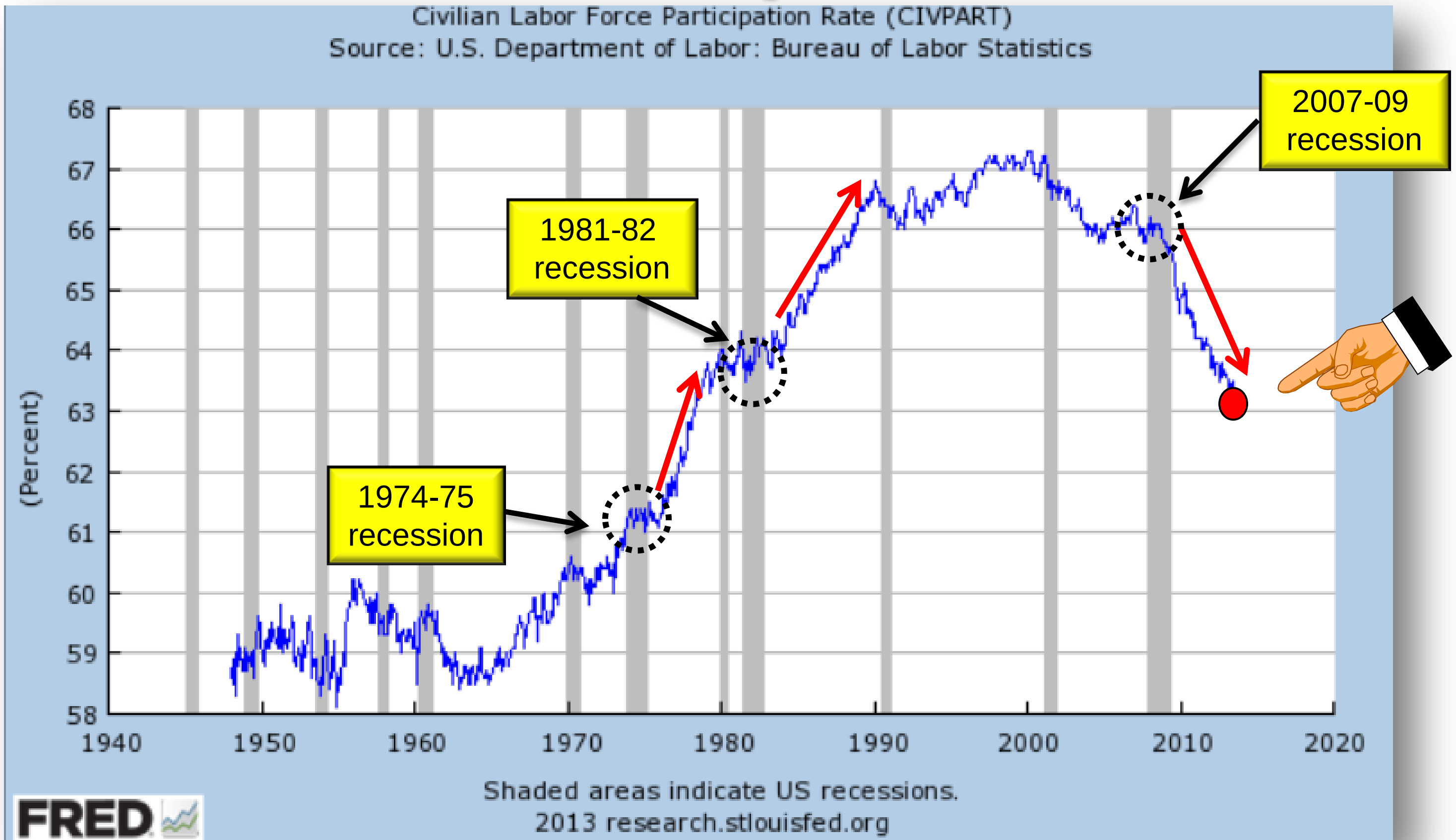
The U6 measure of unemployment also captures discouraged workers not seeking work recently as well as those working part time for economic reasons (cannot find full employment).

Extended Unemployment



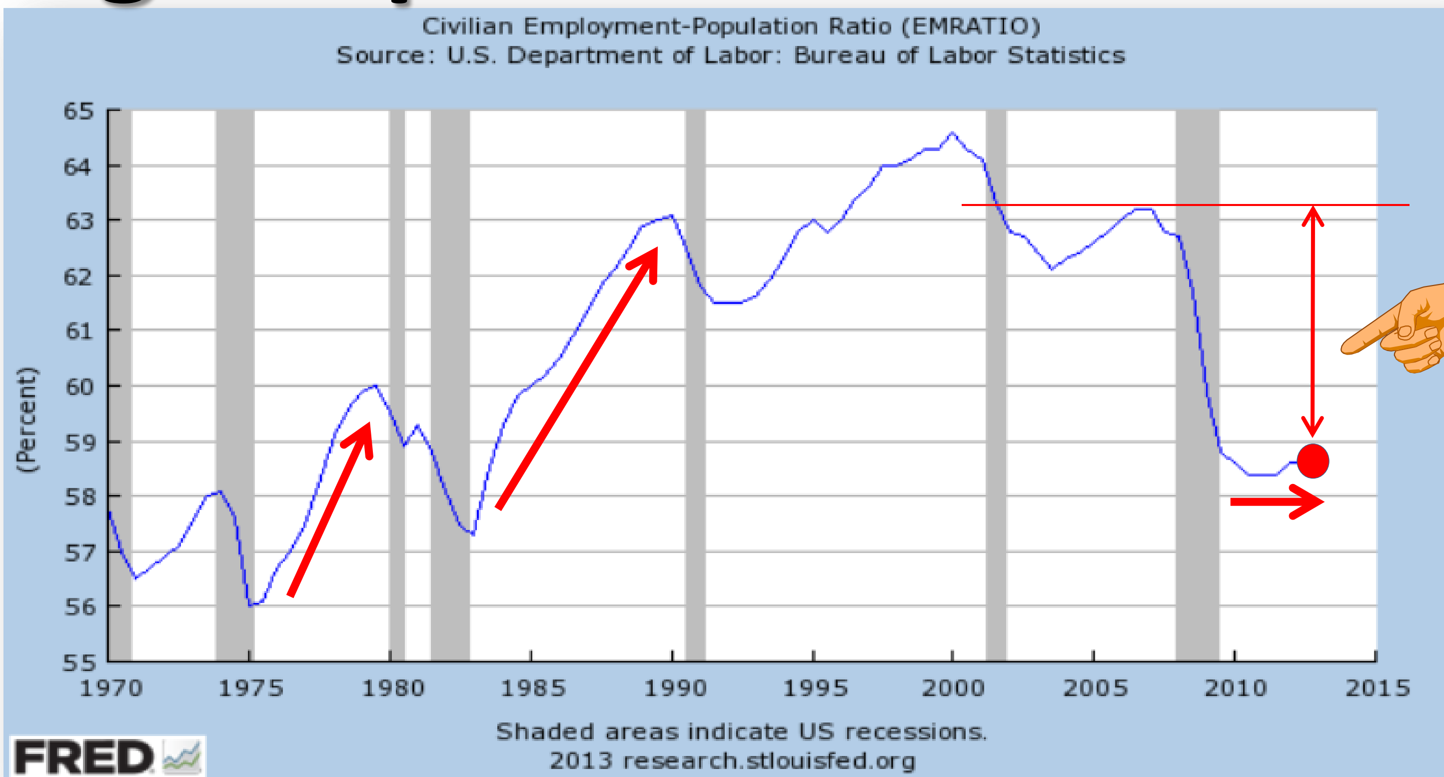
Roughly 4 million people also remain unemployed for 27 or more weeks, some 3 million people more than prior to the recession.

Civilian Participation Rate



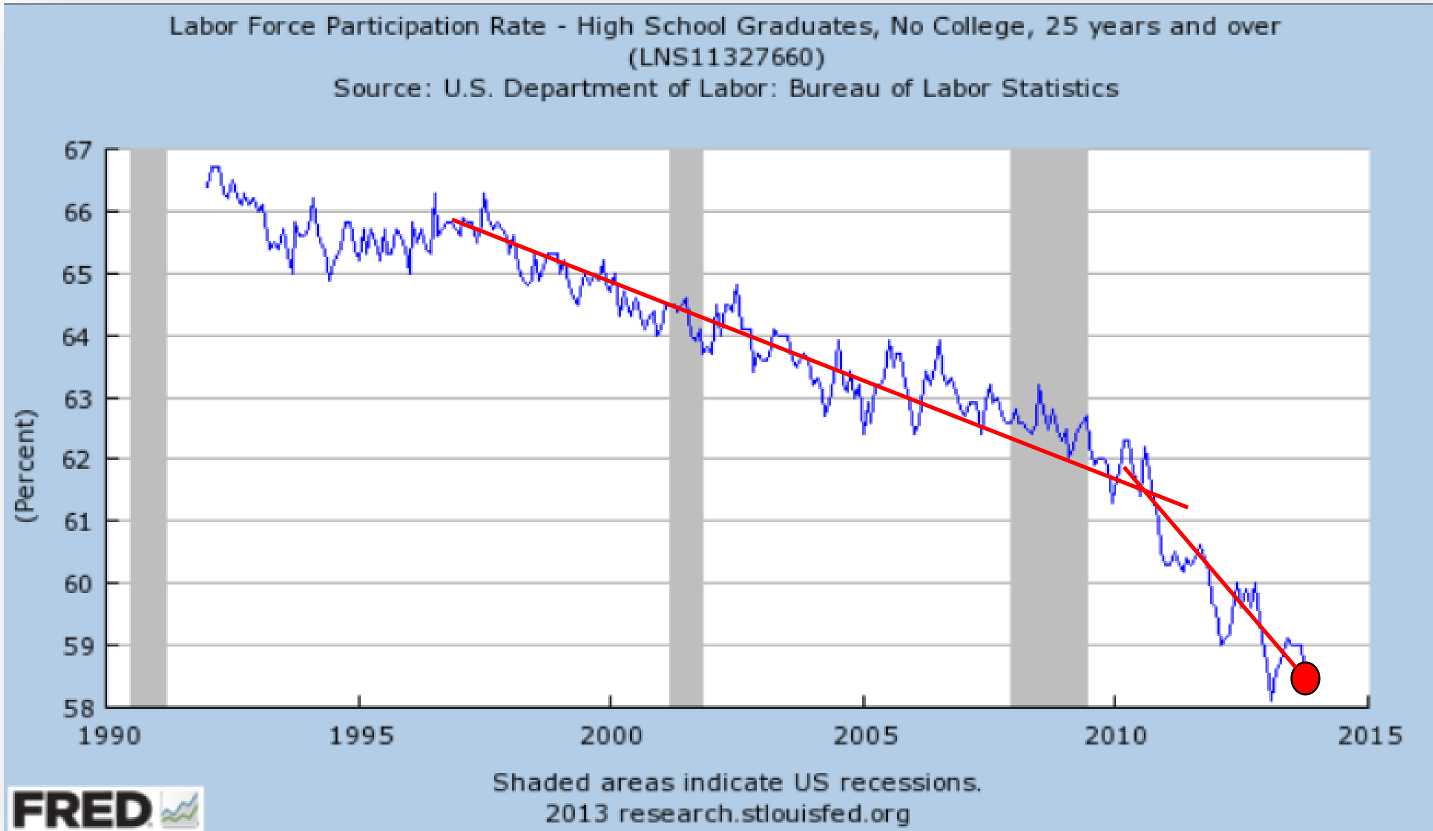
The civilian participation rate is the ratio of the labor force divided by working age civilian population. The rate today is the lowest since the 1960's. A problem in the last two decades made worse by the recession.

Employment-to-Working Age Population Ratio



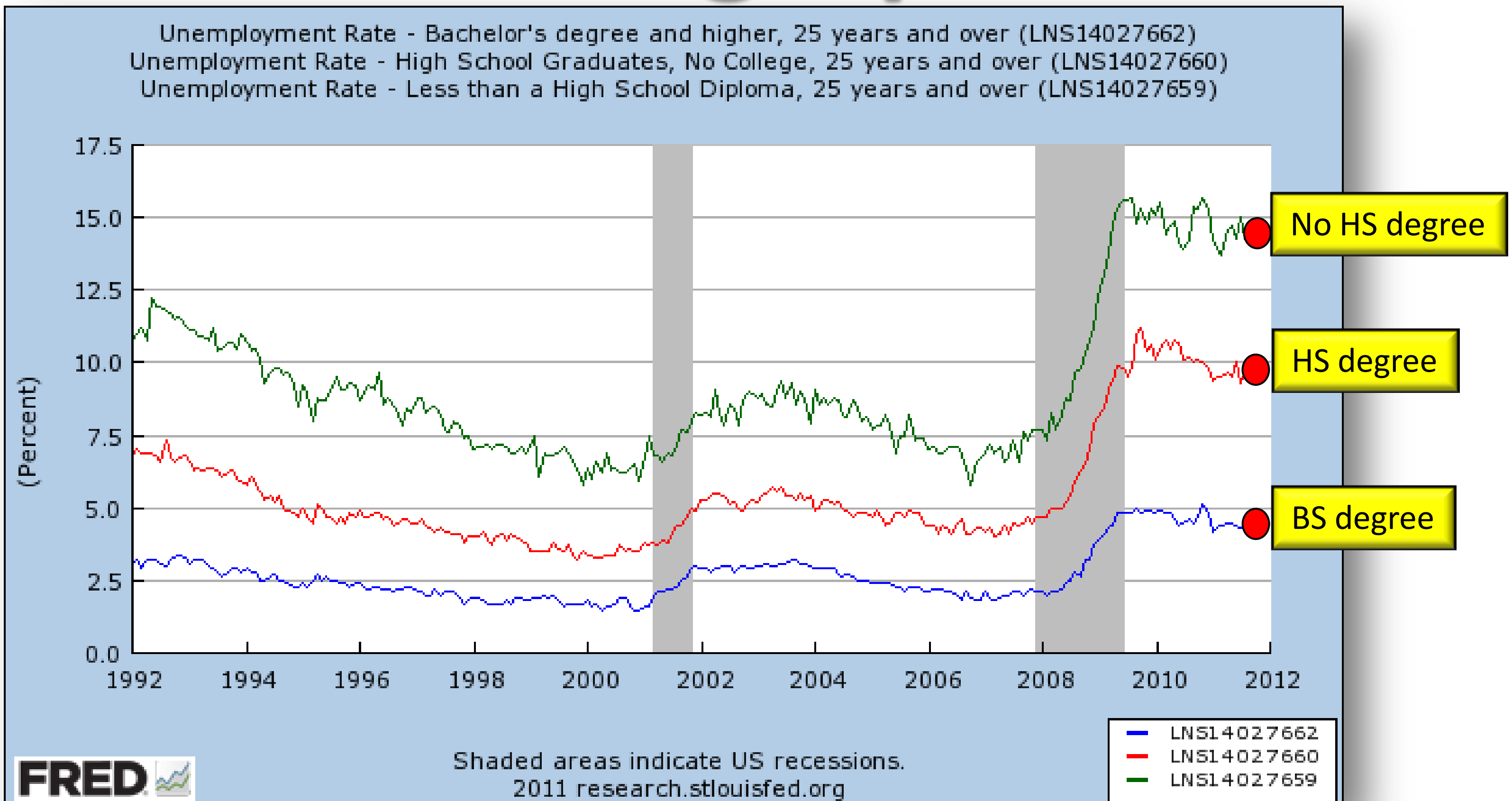
Many labor market economists look at this ratio – prefer this over the official unemployment rate. <u>This reflects the number of people of who could work that have a job</u>.

A Concern



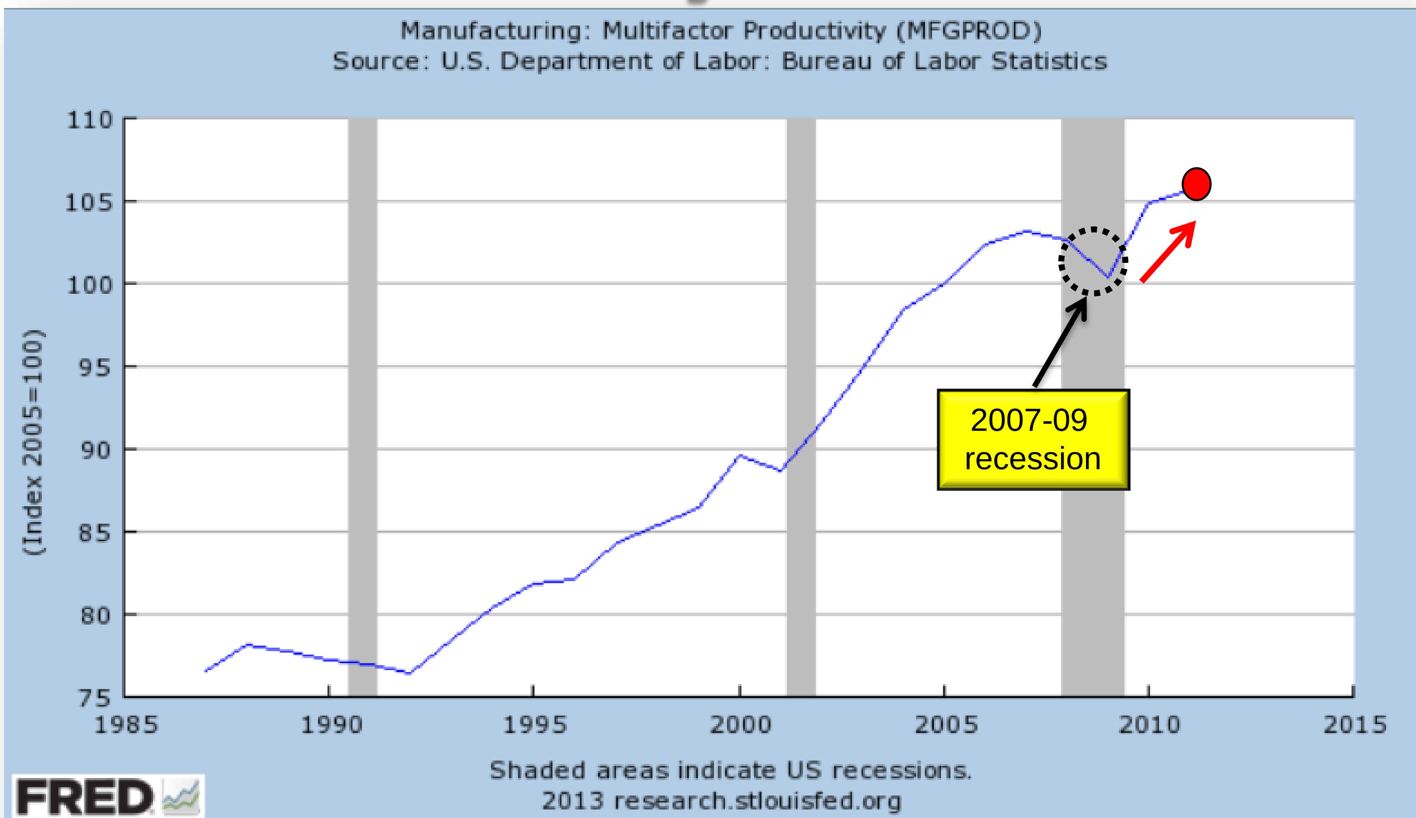
A significant cohort of the working age population that is not participating in the work force consists of those over age 25 with a high school degree.

Some Demographics



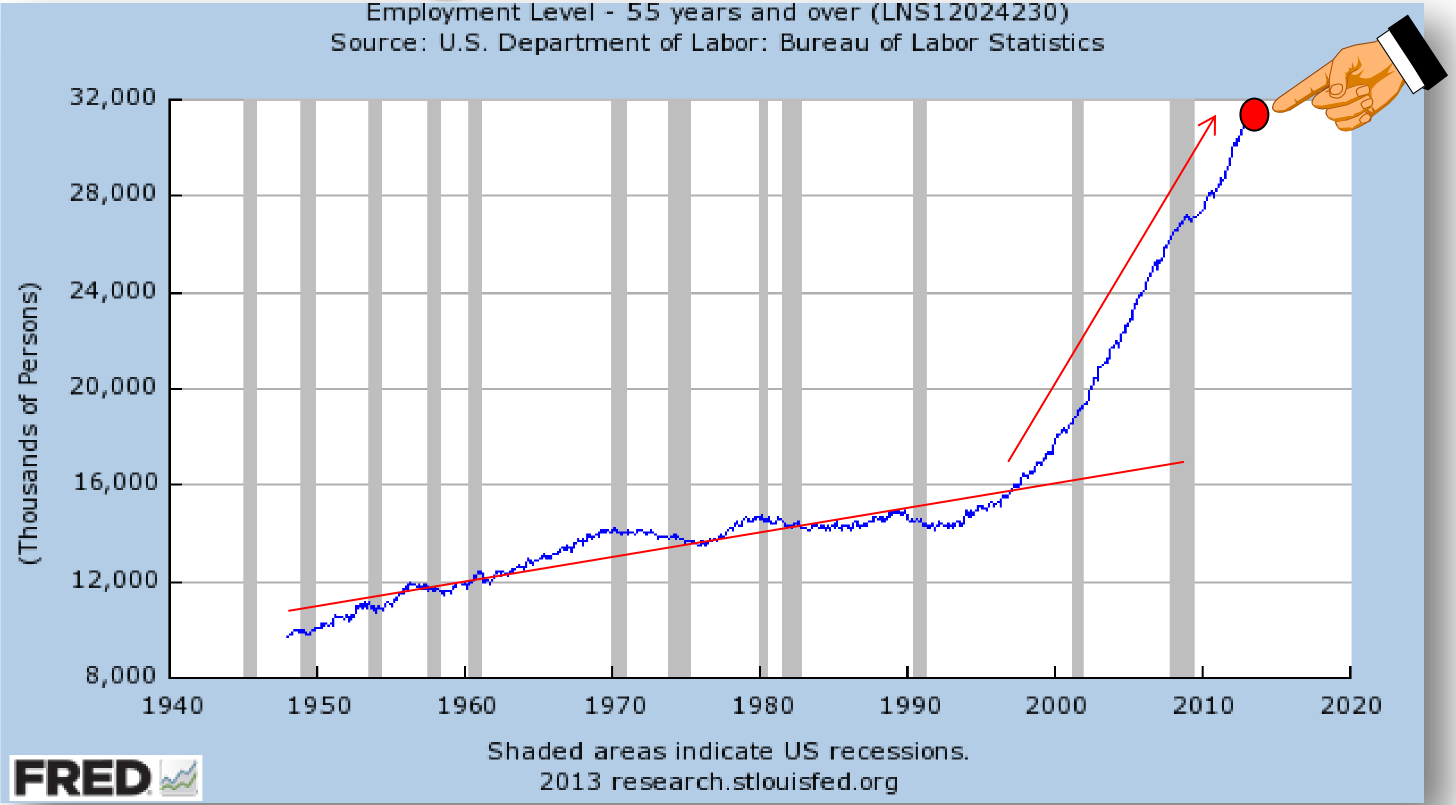
Even if you factor this based on unemployment, you can see the growing dependency ratio, or the number of workers paying into the tax base supporting government programs like Social Security and other entitlement programs.

Productivity Index



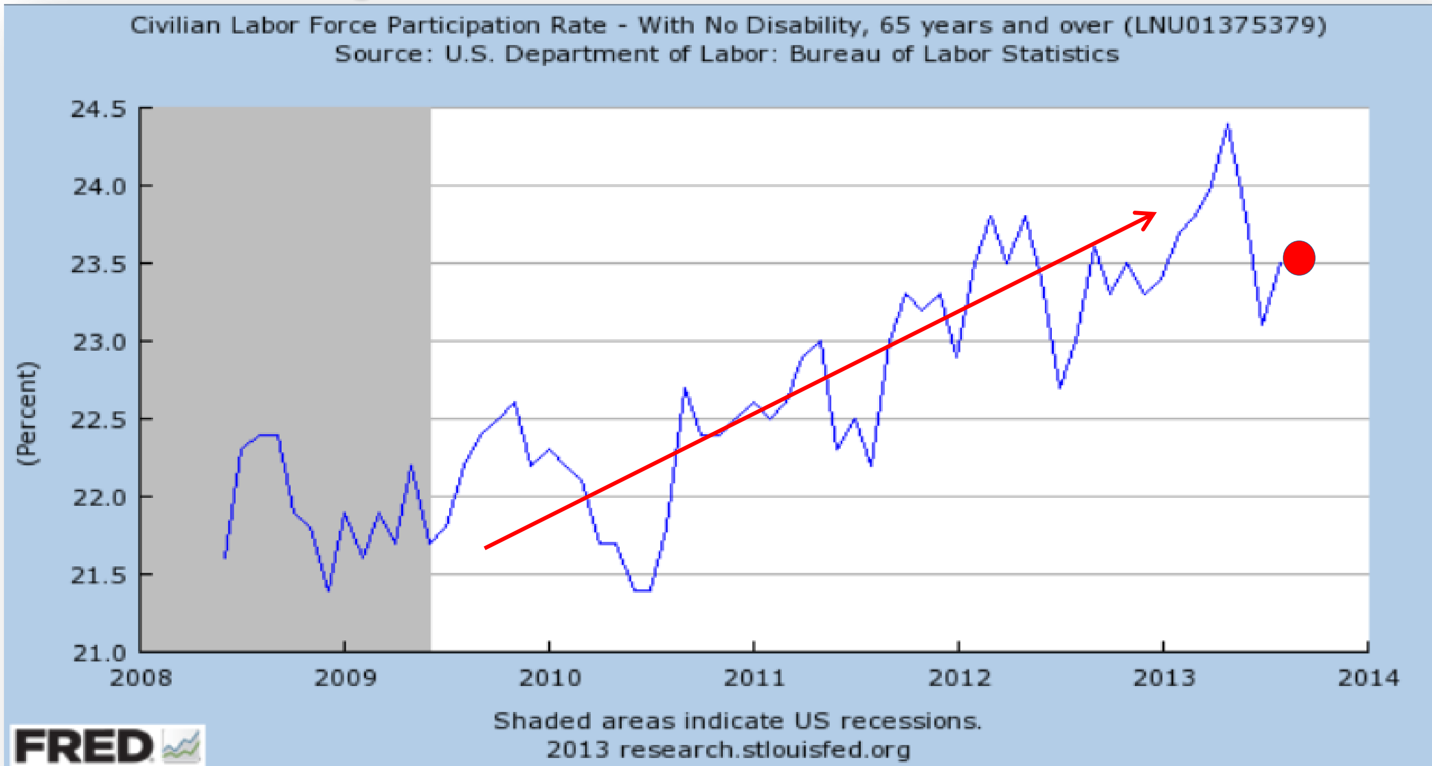
One explanation for a weak job recovery in an economy characterized by weak demand is the sharp recovery in productivity growth.

Employment Level Over Age 55



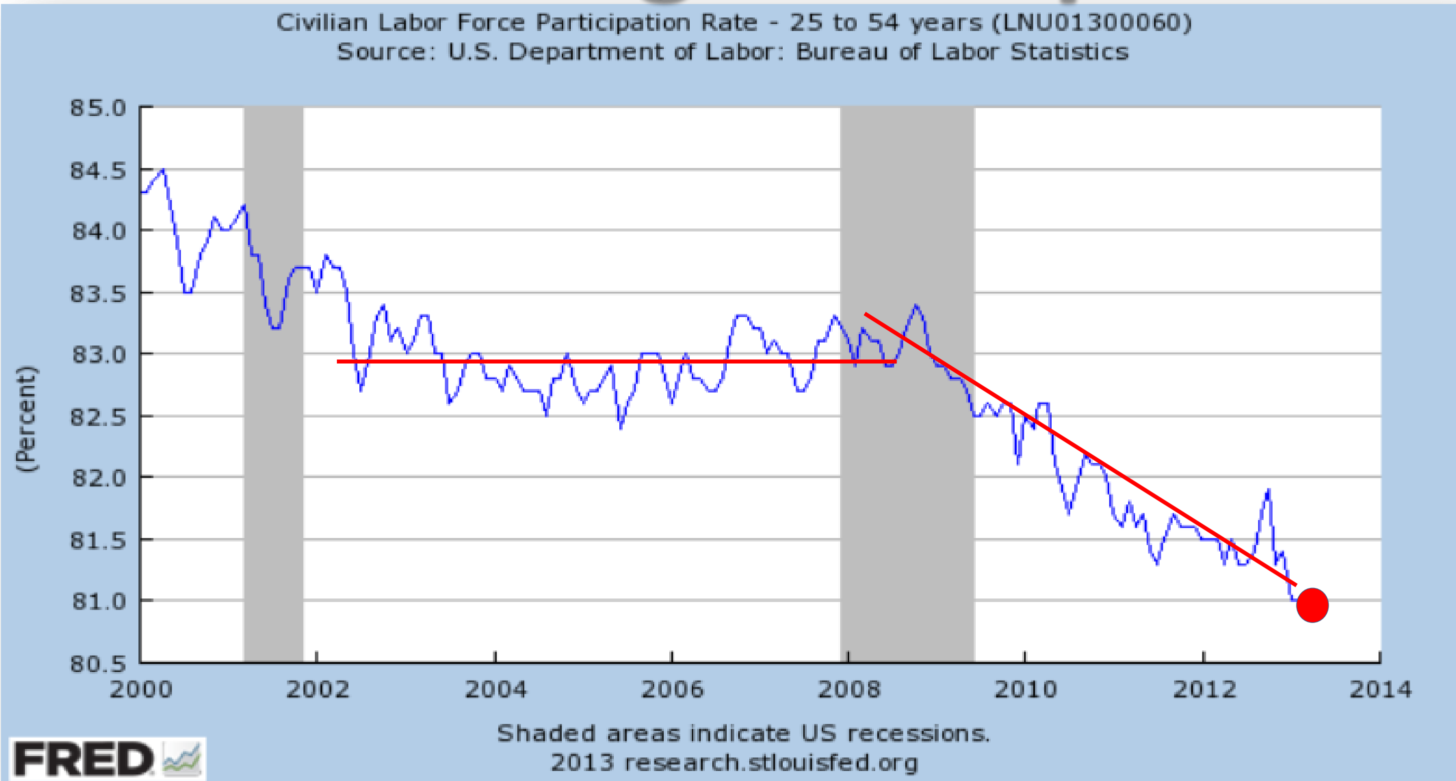
Some blame a retiring baby boomer population reducing the work force for the high unemployment rate. Data actually show they are slow to retire for a variety of reasons, including improvements in health standards, constant real wage rates, lack of savings, leverage and recent recessions.

Over Age 65 Labor Force Participation Rate



In fact, senior citizens are increasing participating in the labor force, no doubt influenced by need.

Falling Labor Participation by the 25-54 Age Group

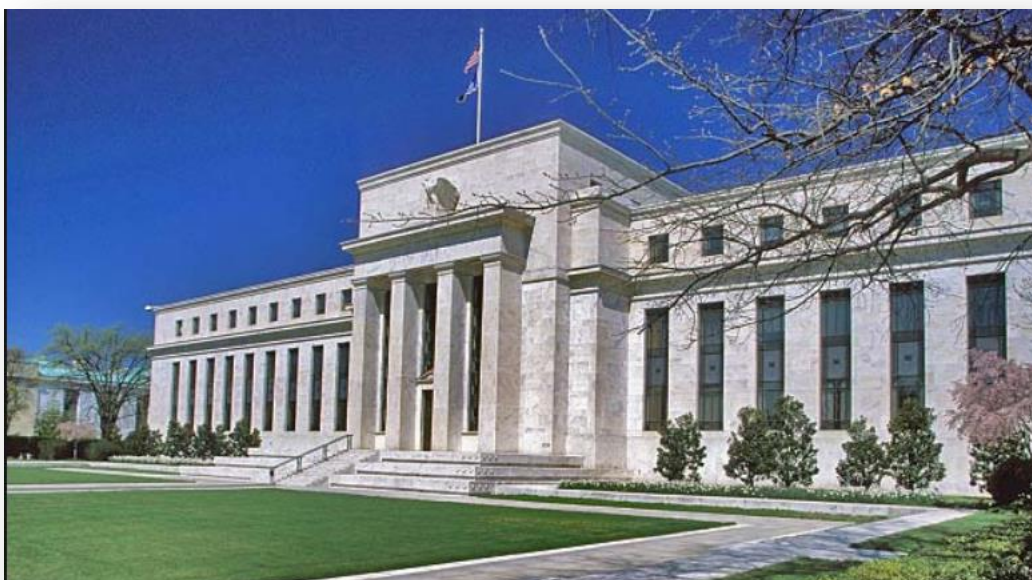


The growth in employment of the 55 and over age group suggests the sticky official unemployment rate is much more than retiring baby boomers.

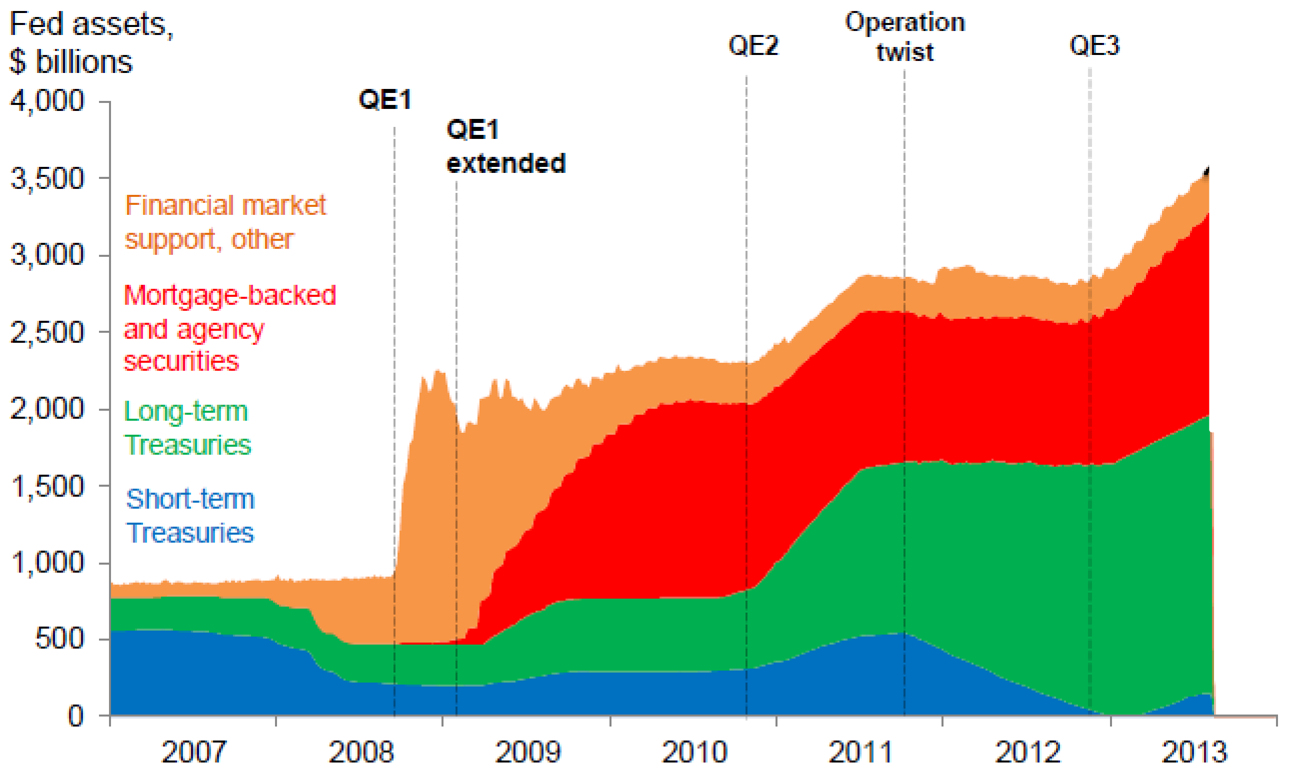
Conclusions

- ✓ The labor market has been slow to recover.
- ✓ We have not dug out of the hole created by the great recession when 8.5 million jobs were lost.
- ✓ The recent recession exacerbated the *labor participation rate issue* developing over the last two decades prior to the recession.
- ✓ Many *baby boomers* continue to *participate*.
- ✓ The most troubling trend is the *lack of participation by younger workers*.

#3:Interest Rates

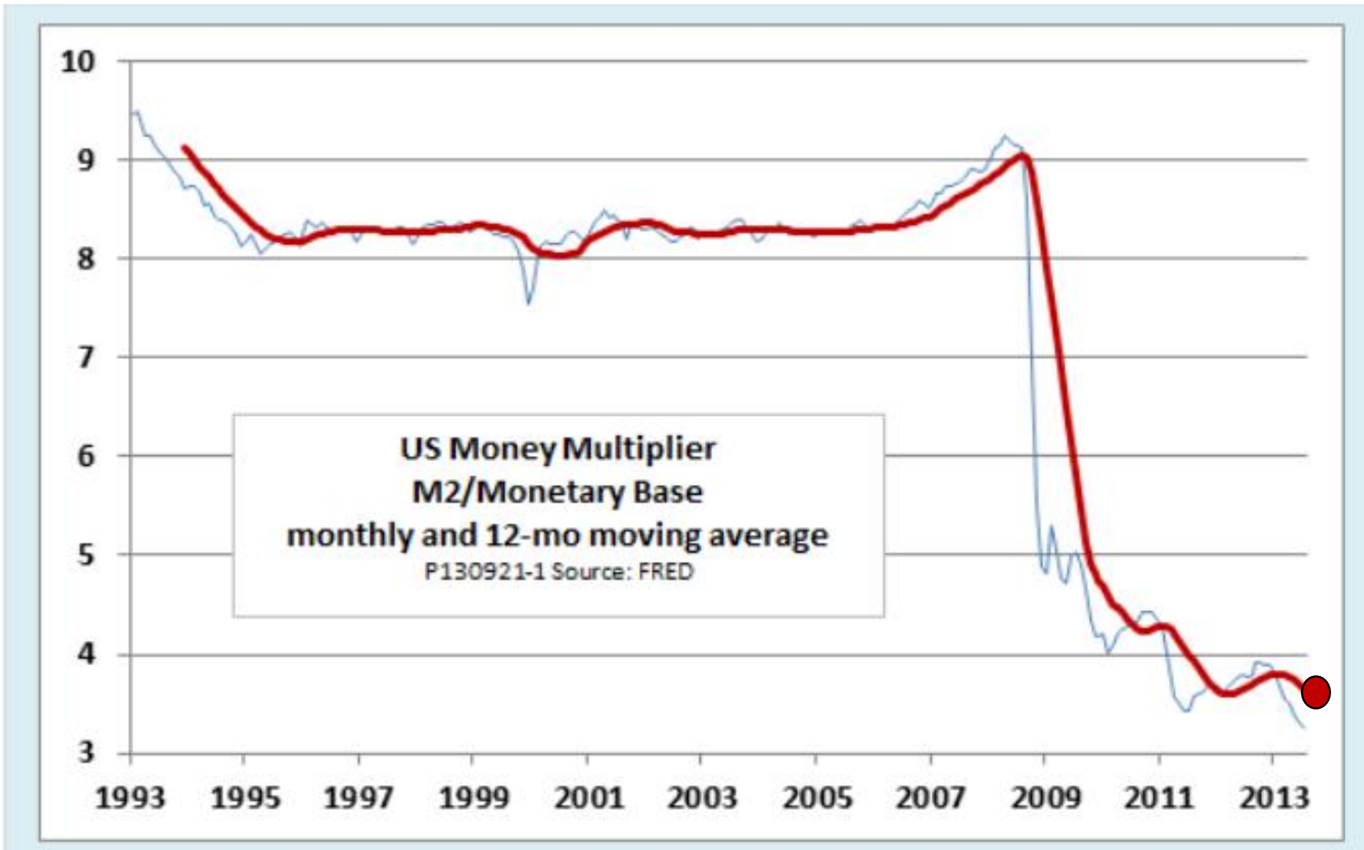


Fed Quantitative Easing



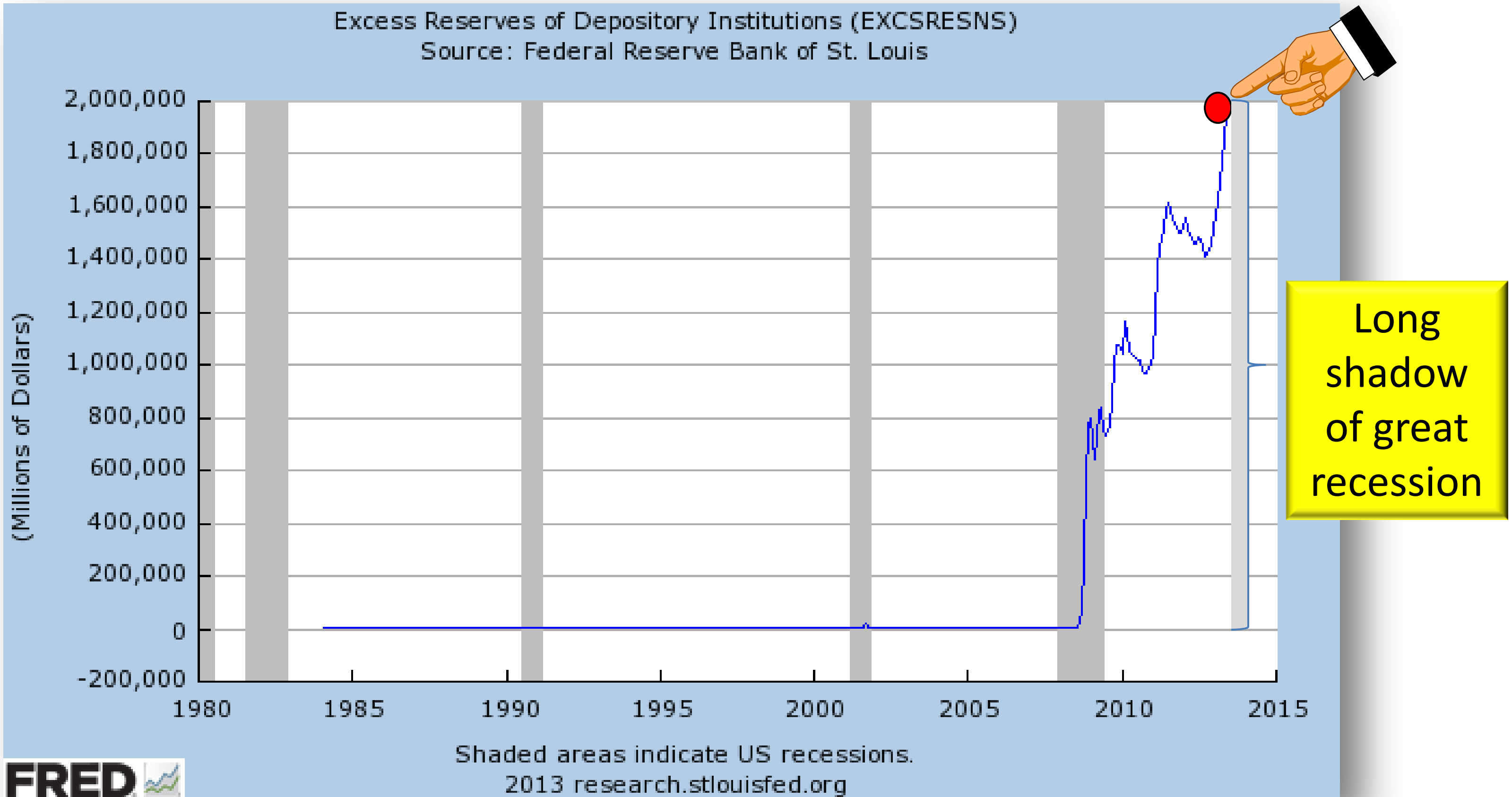
NOTE: Estimated size of the securities portfolio will exceed $3.7 trillion if net purchases continue along the same trend as they have year-to-date.

M2 Money Multiplier



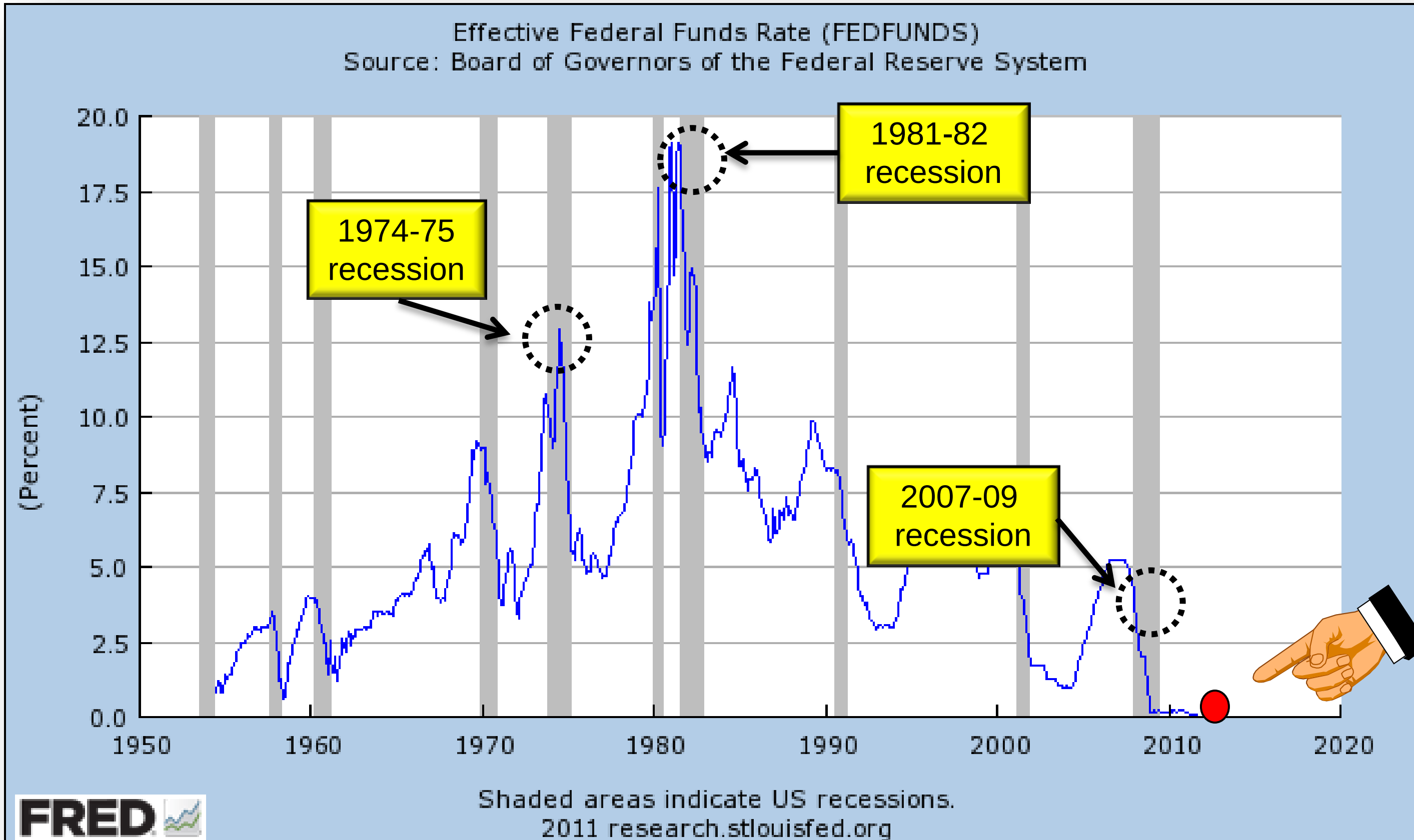
The rise in desired excess reserves by banks has led to less growth in the M2 money supply (numerator) relative to base money (denominator).

Excess Reserves



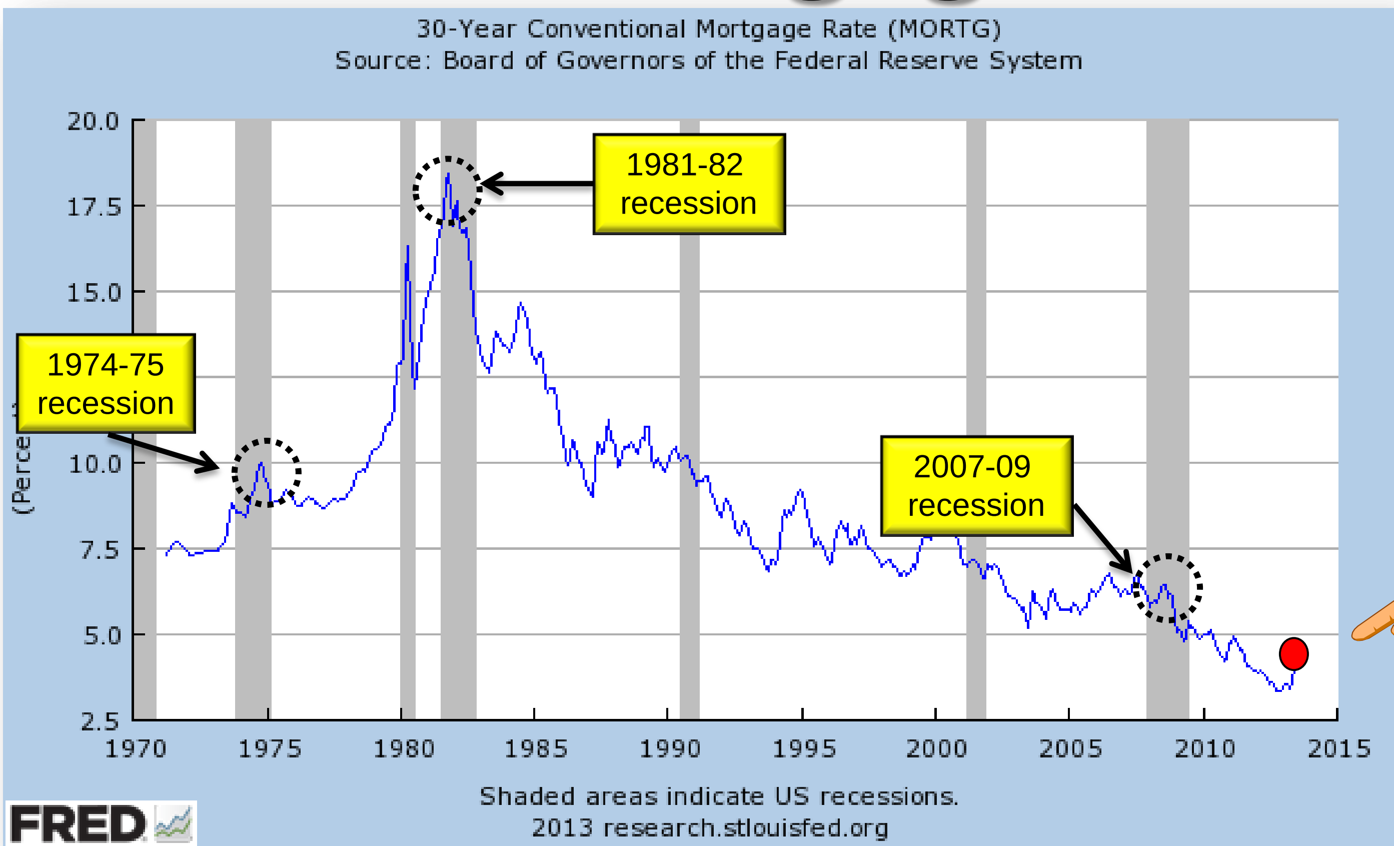
Excess reserves are bank reserves (currency and vault cash) that banks desire to hold in excess of the reserve requirements established by the Federal Reserve. Beginning in 2008, the Fed has paid interest on excess reserves as well as required reserves.

Federal Funds Rate



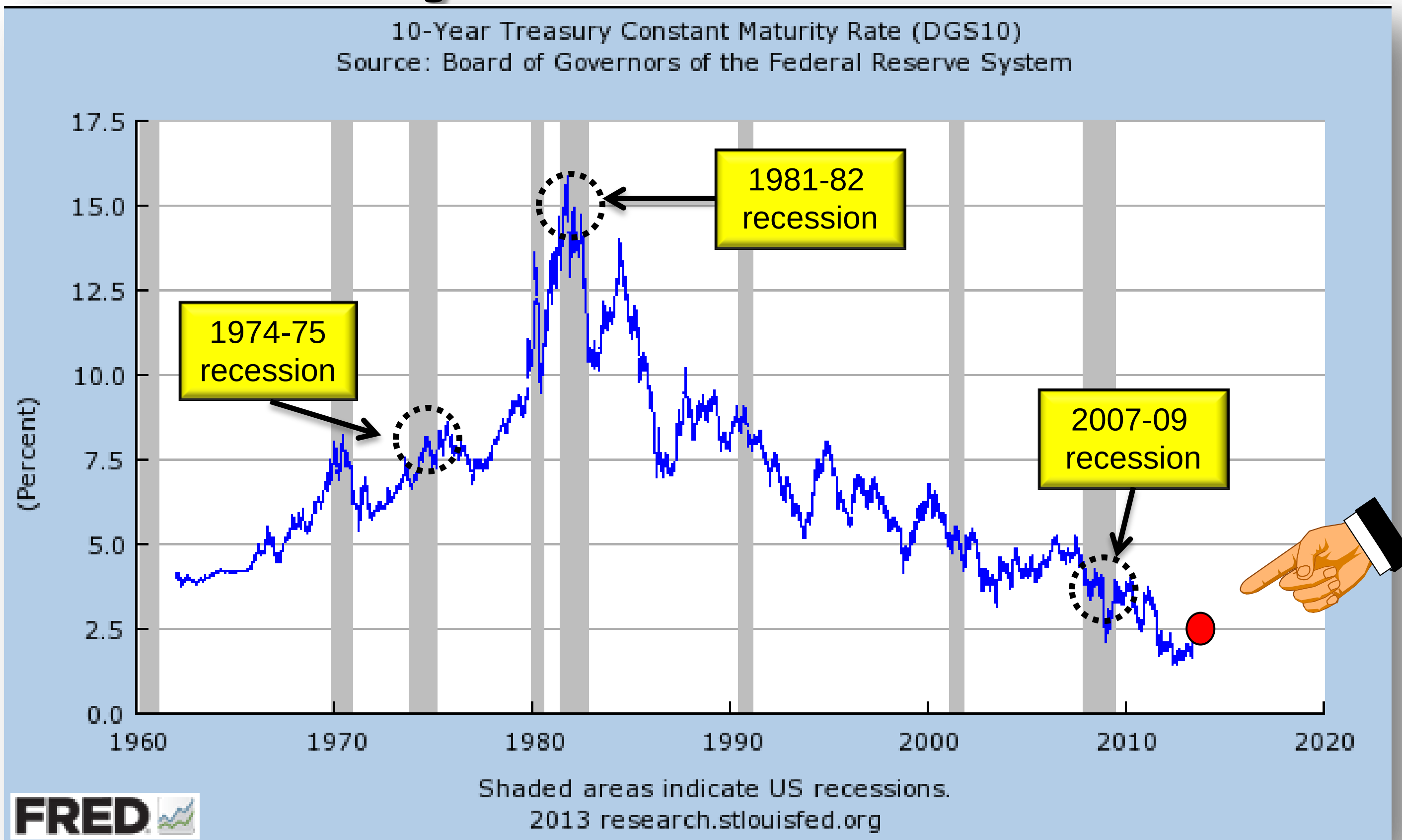
The rate at which a bank lends fund maintained at the Federal Reserve to another bank often overnight. The Fed targets this rate through its open market operations. This typically represents the base rate that determines other rates like the prime.

30 Year Mortgage Rate



A closely watched rate in the housing market, this represents the interest rate charged on a 30 year conventional mortgage.

10 Year Treasury Constant Maturity Bond Rate



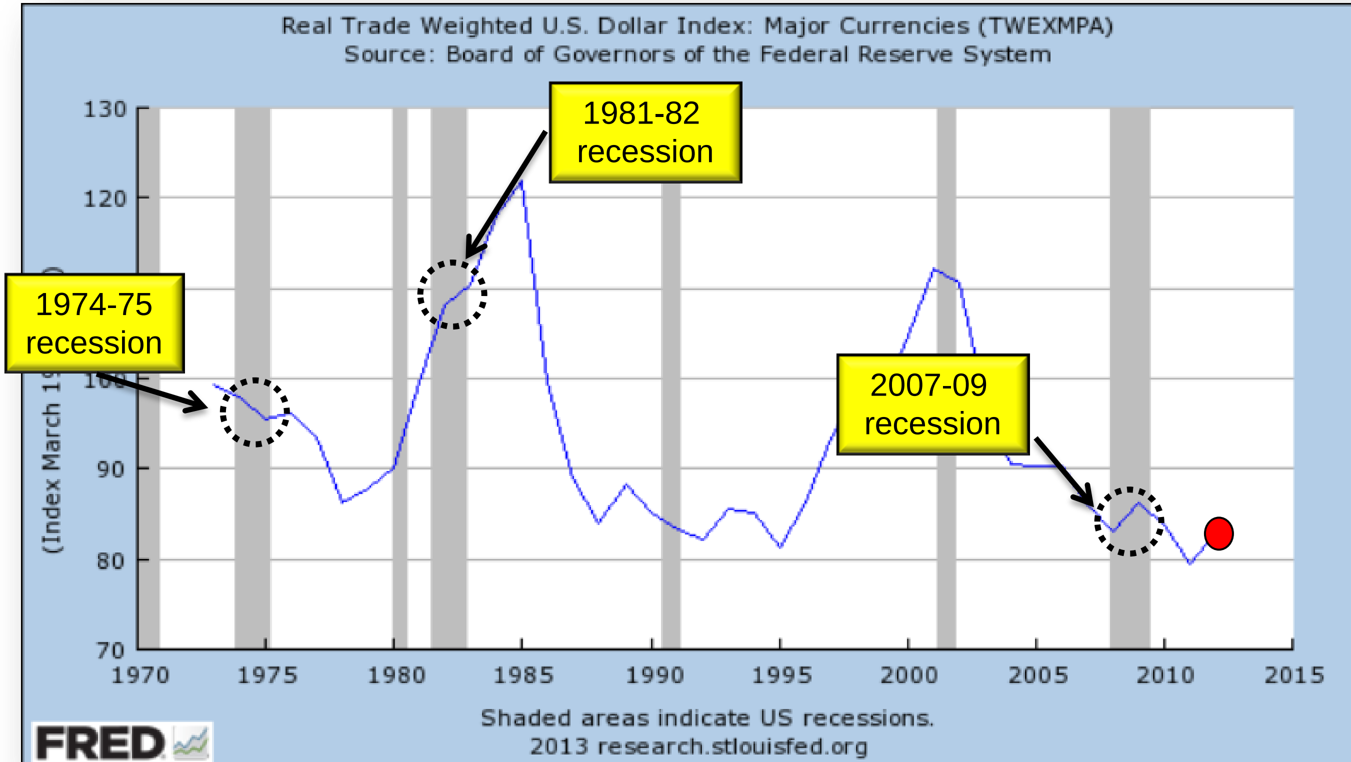
This rate is typically used when evaluating the capitalized value of a long term asset.

Conclusions

- ✓ Traditional monetary policy tools *off the table*.
- ✓ Fed's application of extraordinary measures to meet their dual mandate initially helped save the economy from a far worse recession.
- ✓ But the *banking channel* is *weak* as evidenced by the M2 money multiplier.
- ✓ The *shadow* of the pain inflicted by the *financial crisis*, and *uncertainty* of what lies ahead, has sharply increased bank *desired excess reserves*.

#4: Exchange Rates

Real Exchange Rate



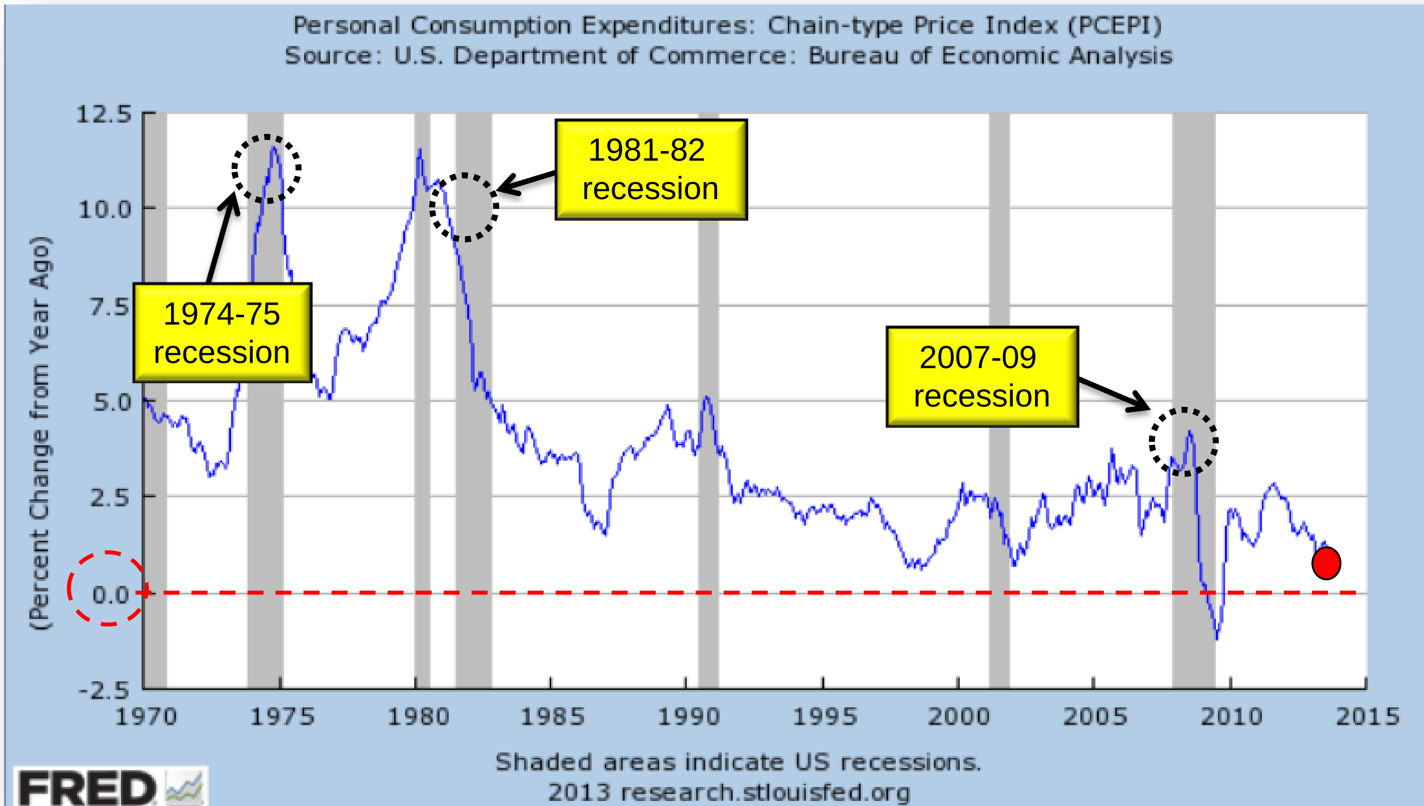
The exchange rate between US and major foreign currencies weighted for trade and adjusted for inflation. A weak dollar makes U.S. goods more attractive to buyers in overseas markets and imports more expensive to US consumers.

Conclusions

- ✓ The foreign exchange rate will continue to remain weak at expected low interest rates.
- ✓ This directly benefits industries that produce exported products. Agriculture is a prime example of an industry benefiting from a cheap dollar.

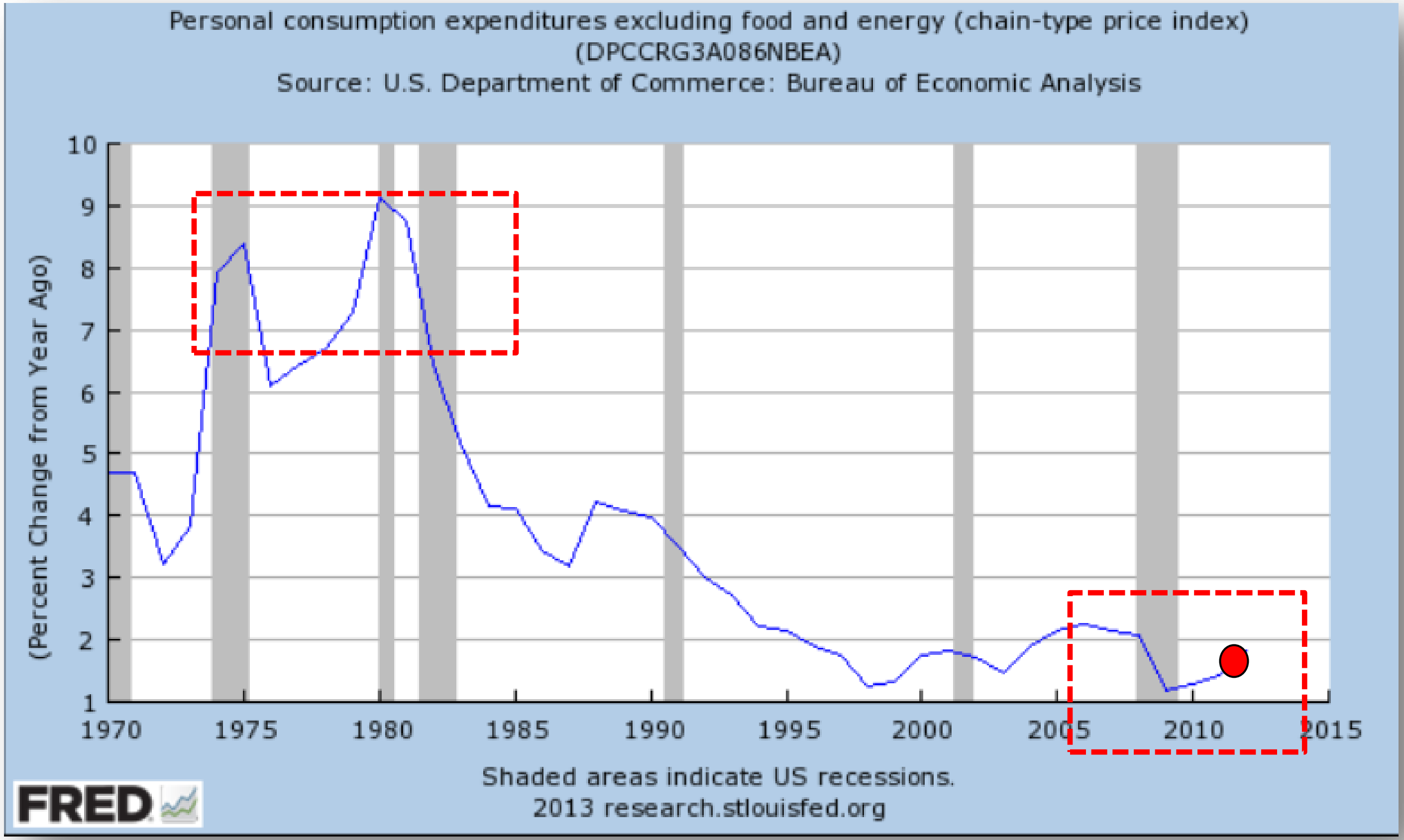
#5: Inflation

Rate of Inflation Based on PCE Price Index



Specifically, the monetary policy decision makers focus on the core rate of inflation, which excludes relative price fluctuations in food and energy prices. Note the brief period of deflation at the end of the Great Recession.

Core PCE Rate Excluding Food and Fuel

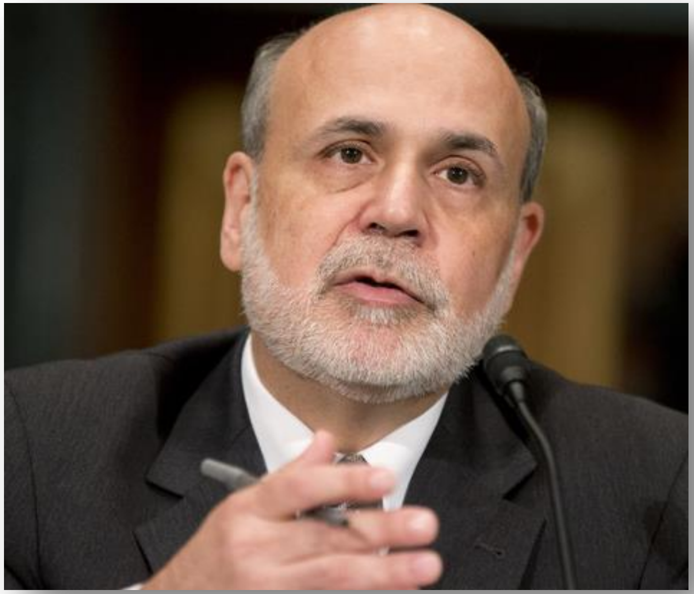


Inflation is tame by any measure at the moment. This represents a much different picture than existed in recent major recessions.

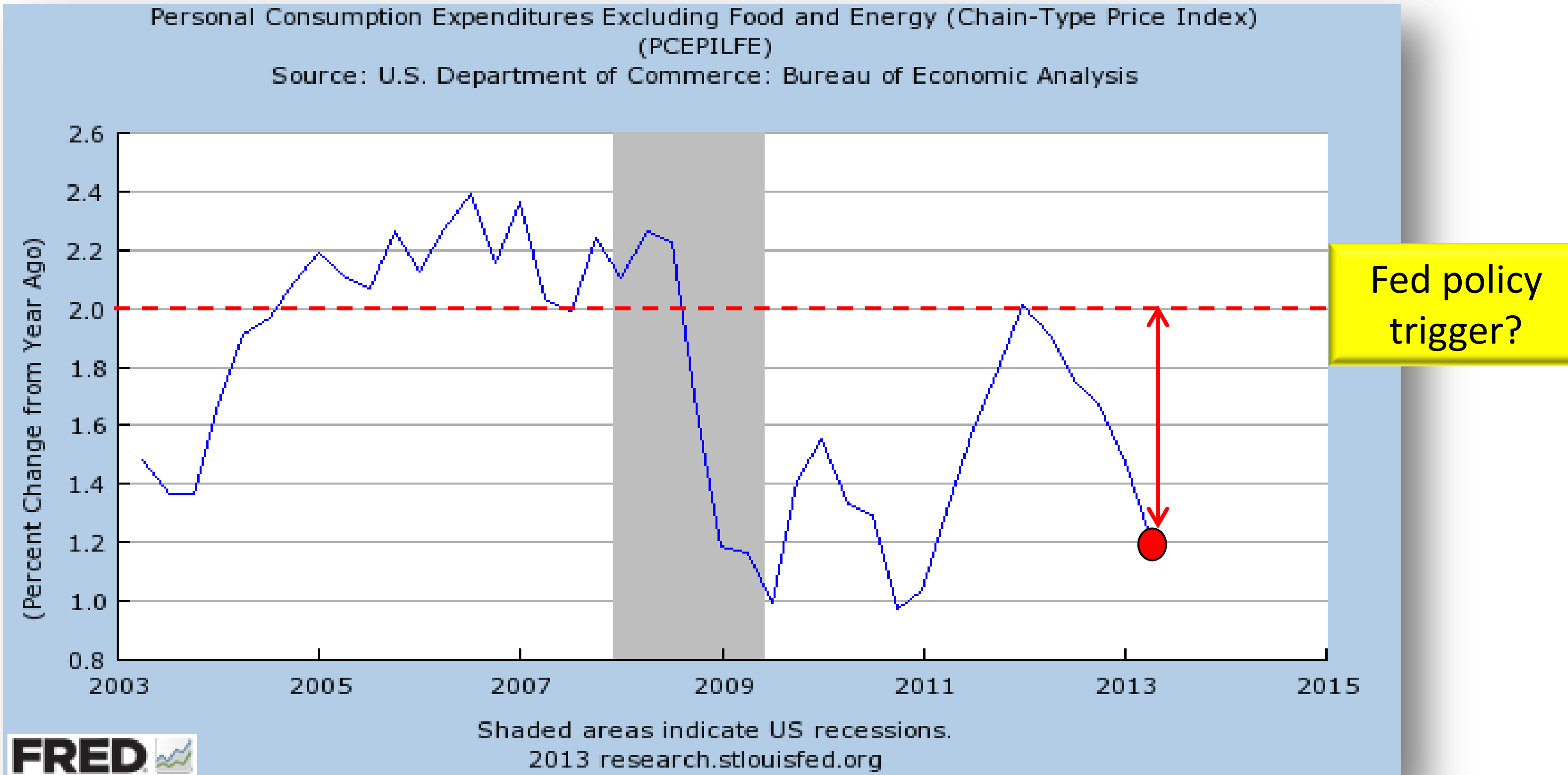
Conclusions

- ✓ The Fed watches the *core* personal consumer expenditures price index when monitoring inflation.
- ✓ This index raised concerns over *deflation* as we came out of the great recession.
- ✓ The Fed's policy target appears to be 2%.
- ✓ The concern is what happens if the stimulus in the economy begins to take effect and inflation rises above the Fed's target.

Fed Policy Watch

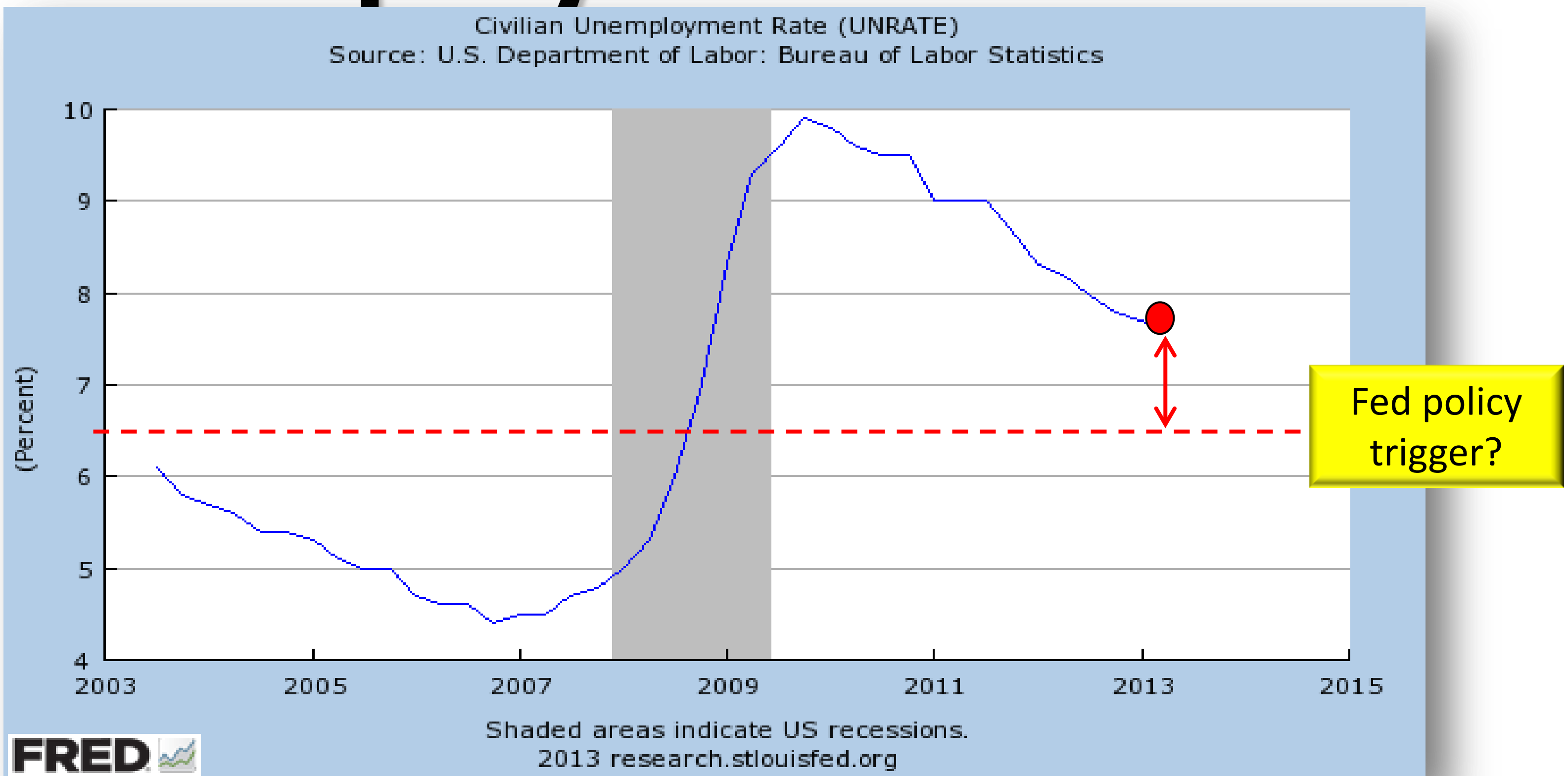
 

Target #1:
Core PCE Rate



Bernanke has repeatedly that Fed would alter its current accommodative policy if the rate of inflation rose ***above 2.0***, or…..

Target #2: Unemployment Rate



Bernanke also said repeatedly said the Fed would alter its current policy if the unemployment rate fell ***below 6.5 percent***. Now hinting at ***below 6.0%***. They are also looking at the ***employment ratio*** which, at ***58.3,*** is well below a more normal rate of 63.

Forward Guidance

- ✓ The Fed is trying to improve its forward guidance to the market. Surprised tapering is seen as contractionary.
- ✓ Benanke, for example, said this week that he foresees the fed funds rate remaining at zero even after it begins tapering.
- ✓ Yellen, a key architect of the Fed stimulus, indicated in testimony this week, that she would support pressing on with stimulus until robust growth in achieved.
- ✓ We have *no historical experience* with QE or the effects of tapering, however, which underscores uncertainty on the part of both banks and business.

2013 Big Picture

1. ***Rate of growth in real GDP*** reflects a weaker recovery than observed in recent major recessions with key sector markets like housing and labor remaining under stress.
2. ***Rate of unemployment*** is historically high.
3. ***Rate of interest*** is historically low.
4. ***Rate of foreign exchange*** (i.e., the value of the dollar) is relatively weak.
5. ***Rate of inflation*** is historically low.

Risks Going Forward

Near Term Optimism

- ✓ Stock market indices continue to respond favorably to continued Fed accommodation.
- ✓ Housing prices on re-sales are recovering.
- ✓ Some concern raised recently by Fed district bank presidents about asset bubbles.
- ✓ Improving energy picture.
- ✓ Many prognosticators look for an enhanced economic growth in 2014, with an even better outlook for 2015.

National Worry Meter

1. Climate change?
2. Unemployment?
3. Health Care Reform?
4. Social Security Trust Fund?
5. The deficit as % of GDP
6. Global economy?
7. Lack of clarity on Fed policy?
8. Inflation?

Which of the above causes you the greatest concern over the next several years? **Pick one....**

National Worry Meter

1. Climate change?
2. Unemployment?
3. Health Care Reform?
4. Social Security Trust Fund?
5. The deficit as % of GDP
6. Global economy?
7. Lack of clarity on Fed policy?
8. Inflation?

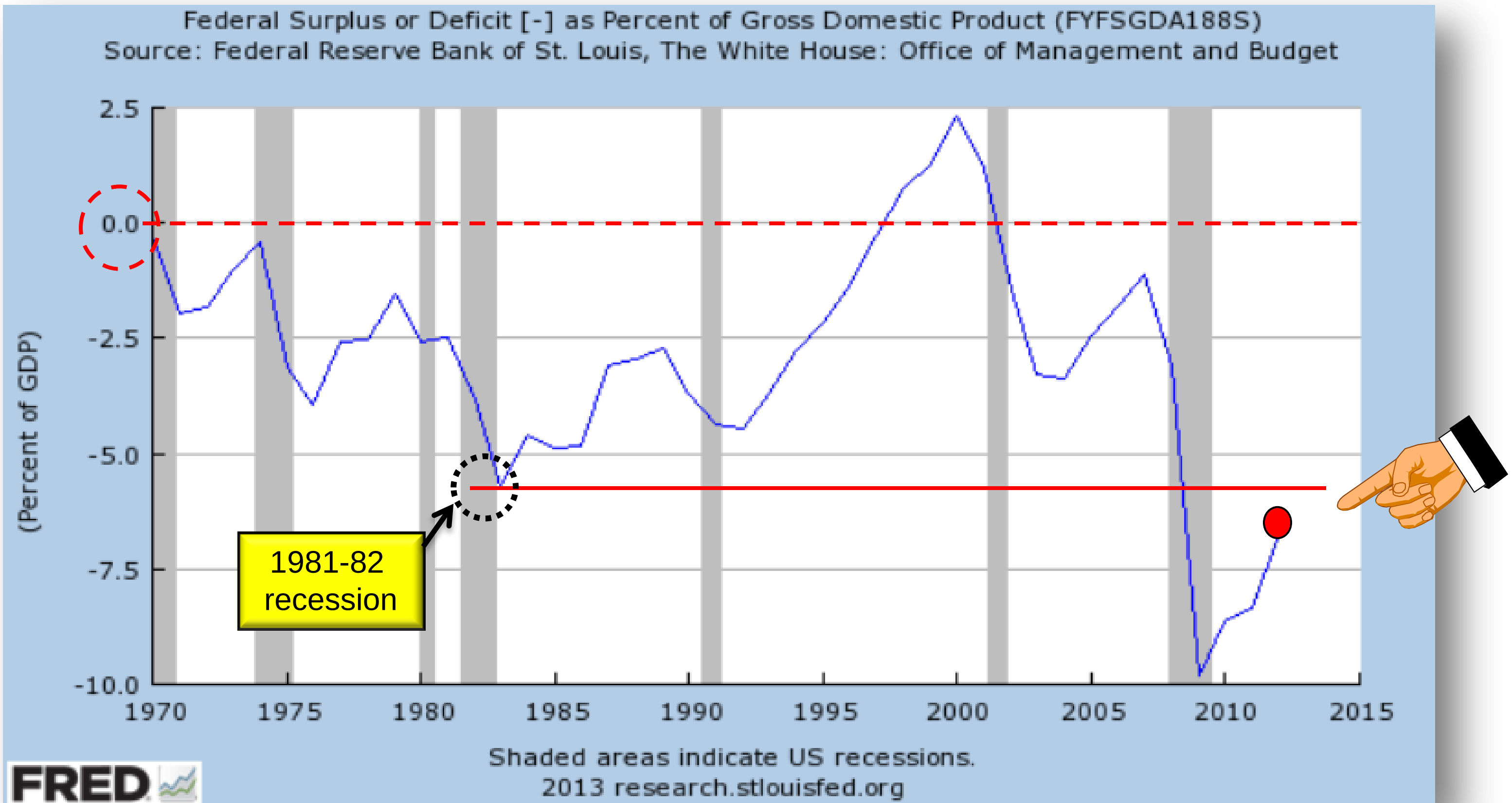
My biggest worry is inflation. Why?

National Worry Meter

1. Climate change?
2. Unemployment?
3. Health Care Reform?
4. Social Security Trust Fund?
5. The deficit as % of GDP
6. Global economy?
7. Lack of clarity on Fed policy?
8. Inflation?

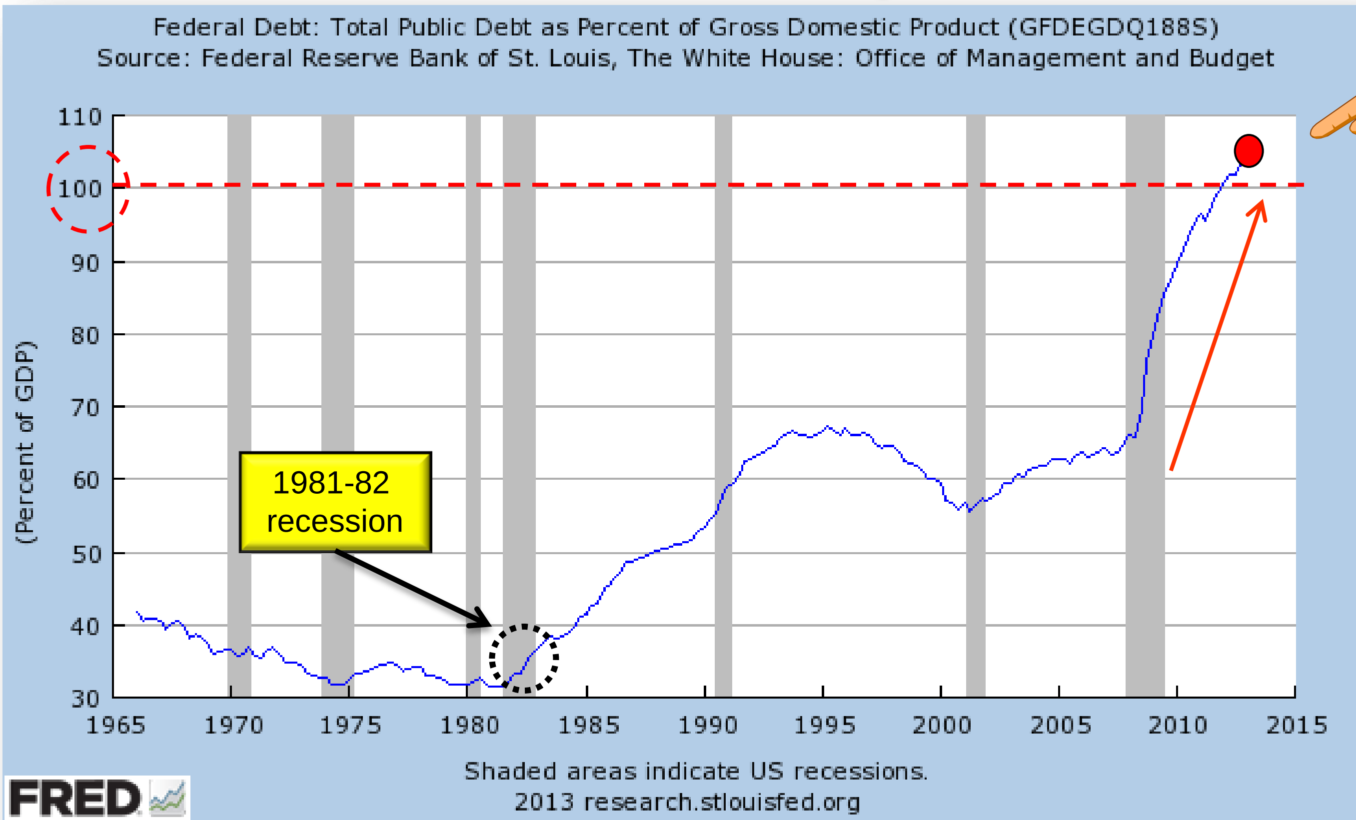
Inflationary pressures above expectations leads the Fed to increase rates; one concern is impact on servicing national debt.

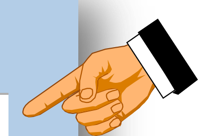
Deficit / GDP



The deficit relative to annual GDP is also moving towards levels that was *managed successfully* after the 1981-1982 recession. Looks reasonable….

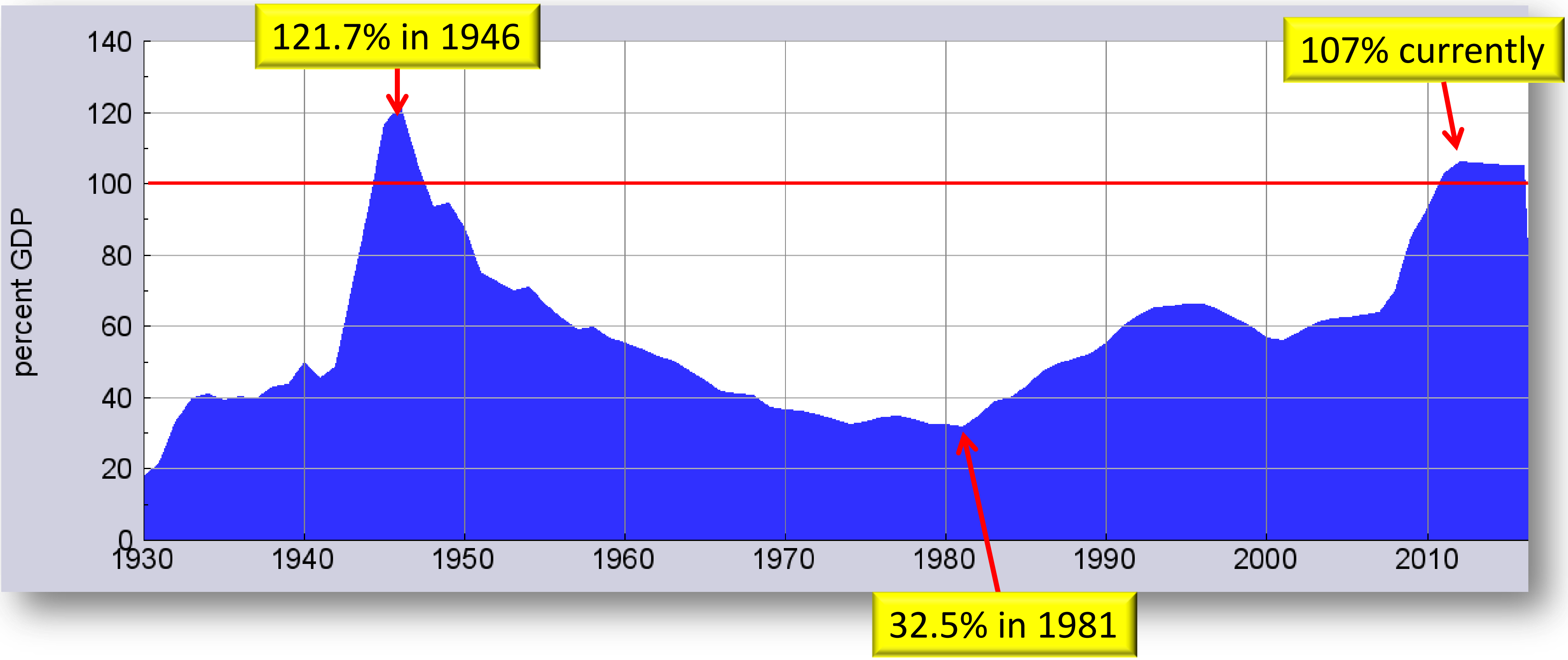
National Debt /GDP





My concern is with the cost of servicing the national debt today ($17 trillion) relative to the $1.1 trillion national debt after the 1981-1982 recession. Can we grow, thereby lowering this ratio, without inflation?

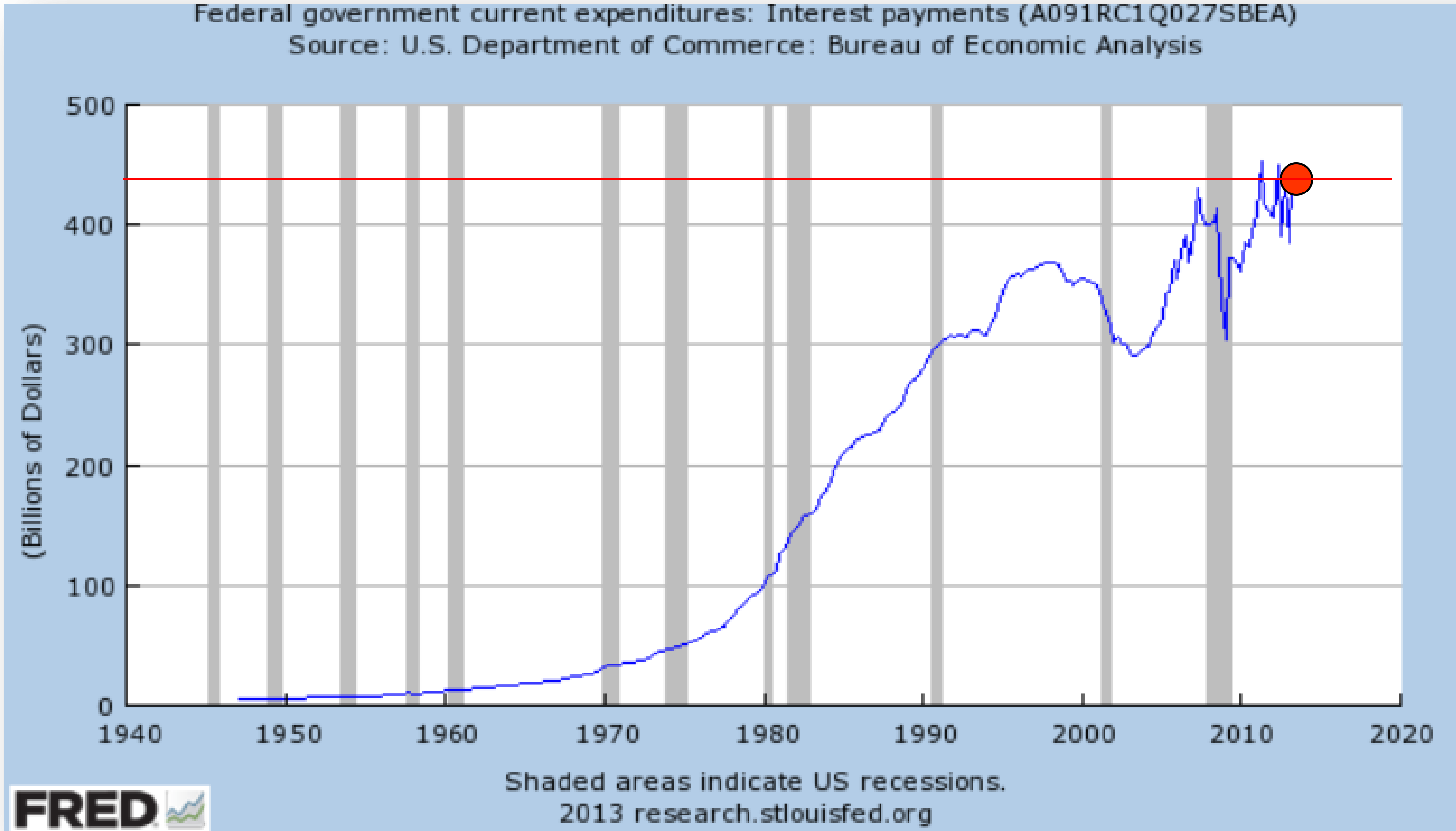
US National Debt as a Percent of GDP
FY 1930 to Projected FY 2017



This *excludes* unfunded obligations, including $7.5 trillion in federal employee retirement benefits and $21.6 trillion in unfunded Social Security obligations. Total unfunded obligations exceed the net worth of all US households.




Interest payments on National Debt



A one percent increase in financing Treasury obligations at a national debt of $17 trillion is $170 billion. This could reduce what little discretionary spending is currently available in the federal budget unless taxes were raised.

2014 Expectations

- ✓ **Real GDP growth rate**: 2.5-3%; Much recent growth has been in building inventories. Rate is below potential growth; conditioned by soft growth with trading partners. Euro zone is emerging from a protracted recession.
- ✓ **Interest rates**: likely remain historically low with some uncertainty associated with the degree and pace of Fed tapering its purchases.
- ✓ **Unemployment rate**: 6.9-7.2%; concern remains about declining labor participation rates.

2014 Expectations

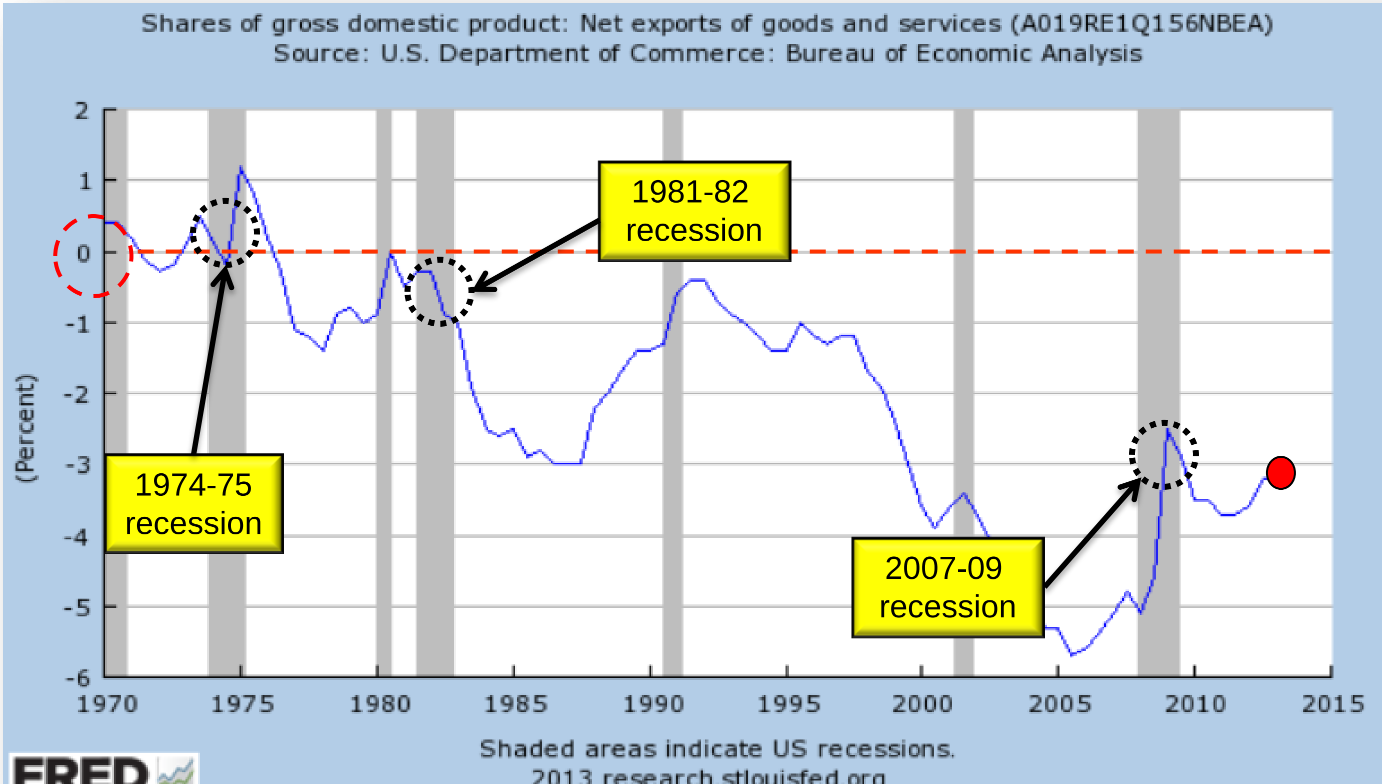
- ✓ **Inflation:** 2%; represents the Fed's target.
- ✓ **Exchange rates**: continues to remain weak given expectations for interest rates and inflation. This should help the merchandise trade balance which has been narrowing.
- ✓ **Other indicators**: Business spending growing at a moderate rate (4-5%) as uncertainty about future macroeconomic policy. Housing re-sales improving while ultimately boost new construction.
- ✓ ***Shocks obviously would alter these expectations.***

The Longer Term…

- ✓ Unfunded federal obligations coming due as an aging population retires.
- ✓ The number of workers paying into the tax base supporting federal programs is declining significantly (from 9 to less than 3 workers per beneficiary).
- ✓ We need to get serious about federal spending and not leave it up to future generations to deal with the costs of both funded and unfunded federal programs.

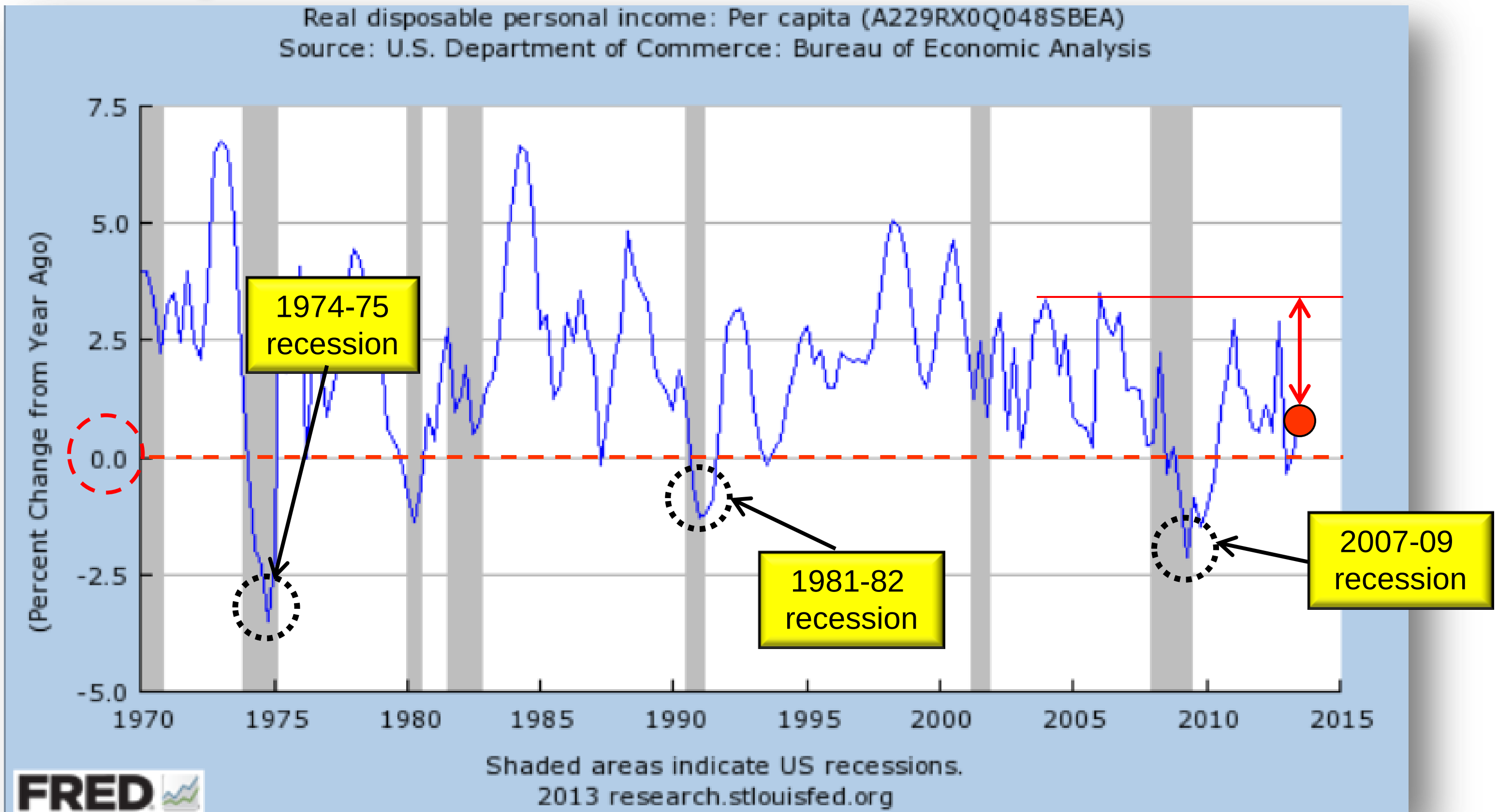
Questions?

Net Exports/GDP



The U.S. has been a net importing nation since the 1970's. This lowers GDP from what it would be if the U.S. was a net exporting nation. During the recent recession, exports largely to emerging nations grew at a faster pace than imports. We are seeing some narrowing of this trade gap as the global economy picks up.

Annual Growth in Disposable Income



Disposable income refers to personal income after taxes. By definition, this is allocated to consumption and savings.